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Gleanings in Bee Culture

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Front view of the honey house showing the fumigating room.

Rear view of the honey house with the basement door open.

Removing and Extracting the Honey Crop

By Warren A. Munro

Our system of handling the honey crop is not practical for all beekeepers. However, it is adequate for the producer of 50 to 100 tons of honey annually.

Just before the main honey flow which is from clovers and sometimes very rapid for a time, we put two or three supers of empty combs on every hive, depending of course on colony strength and crop prospects. With 1200 colonies of bees in 20 beeyards and with limited help, it is not possible to get around as fast as we would like and we do not want the bees to get too crowded at the beginning of the honey flow. From then on we put on supers more sparingly with the idea of having heavy, well finished supers of honey at the close of the honey flow. Well finished supers invariably give better and thicker honey than do supers from colonies that have been given far too much super room. As our Federal grading regulations permit only 17.8% moisture in No. 1 honey, we take all reasonable precautions to keep the moisture content down as low as possible, for we like to mark our honey No. 1. We use 9 combs in a 10-frame super. Bees finish up supers faster with 9 combs than with 8 combs and build less burr comb.

Our beeyards are laid out with a roadway through each of them, with about an equal number of hives on each side of the roadway, so that in removing heavy supers it is unnecessary to carry them more than a few feet.

Carbolic Covers for Freeing Supers of Bees

We use carbolic covers to clear supers of bees. The number of covers needed depends on weather conditions, not so many being required if the weather is hot, as when it is a little cool. In hot weather five covers will keep a man busy. One man can bring in a load twice a day and this is enough to keep two men extracting. However, if robbers are troublesome, one man never goes alone for a load of honey. We always carry a tarpaulin to cover the supers as they are loaded. The tarp also is useful to wrap the carbolic covers in to prevent excess evap-

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oration of acid while on the road.

When extracting, we arrange to have 2 or 3 days' supply of honey ahead of the extractors to allow for unfavorable weather conditions when it would not be easy to remove honey with carbolic covers.

It is not necessary to use the side racks on the truck when hauling in heavy supers of honey. Our truck deck is wide enough to take four supers placed lengthwise across the deck. The outside rows are tilted in a little by 1-inch strips fastened on each side of the deck floor so that the tendency is for the supers to work to the center as they slope that way. We have hauled a lot of honey this way and have never had any supers fall off.

This is a white honey section and as we seldom get dark honey we do not have to rush white honey off. However, should there be dark honey prospects in some locations we still have plenty of escape boards which we can use if weather is unfavorable for acid covers, or if we cannot get it off fast enough with acid.

How We Extract the Honey

Honey is unloaded under cover as our truck garage is built to the side of our extracting room. The truck floor is only slightly lower than the extracting room floor. The steam boiler is located at the end of this garage part of the plant.

The floor of the extracting room is concrete and is sloped to drain in such a manner that when the floor is flushed off with water at the close of the day's extracting, none of the water will run under any supers of honey stored in the room.

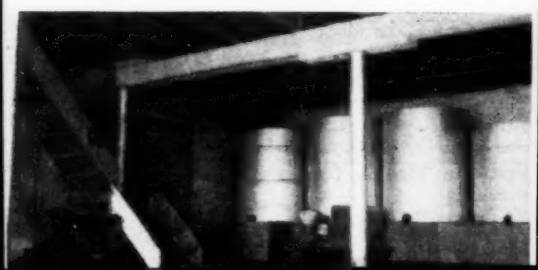
We have a natural gas heater which we use to keep the extracting room hot at night if we are extracting during spells of hot weather. We also make use of an electric fan if the weather is uncomfortably hot when we are extracting.

I have tried various mechanical uncapping machines but have not found a satisfactory one yet, so we use steam knives. I like an electric knife, myself, as it is lighter and not so cumbersome as a steam knife. The electric knife which I have has that senseless offset between the handle and the blade. I don't know why anyone would make a knife like this for I cannot see in an offset handle anything but a disadvantage.

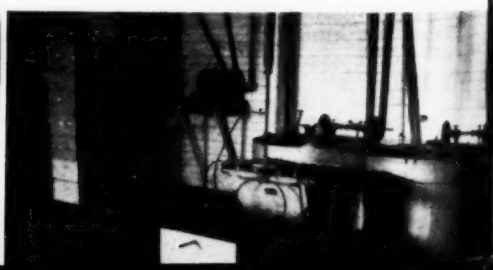
We use two Simplicity extractors, side by side, and a Brand capping melter is located in front of the extractors as close as possible. The uncapped combs are placed directly in one extractor. One extractor is running while the other is being loaded. We formerly used a comb reel but discontinued its use as it made an additional handling of all the combs.

With us the capping melter does not darken honey to any extent. A high percentage of our extracting combs are quite new, as we have for a number of years been melting up old black combs. I think heavy old combs are better in wax than anywhere else, and at today's prices, the wax will buy new frames and foundation. We also remove the slumgum from the melter 2 or 3 times daily, or as often as seems necessary. There probably is a good market for a good hydraulic capping press if some of the bee supply manufacturers would get one out.

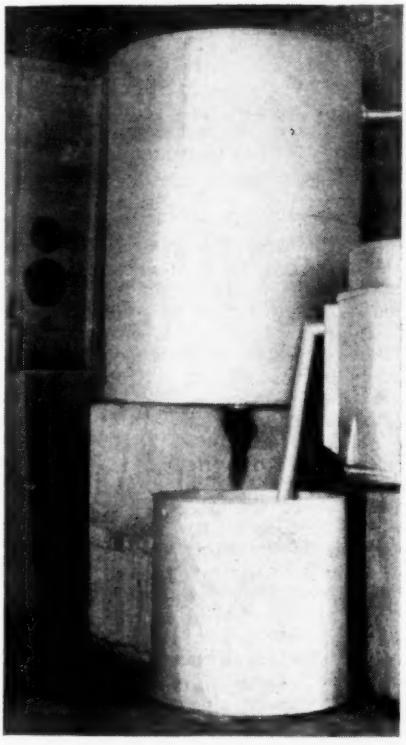
From the extractors and the melter the honey flows into a reservoir 4 feet long, 20 inches deep, by 12 inches wide. It has a steam coil of ¾" pipe in the bottom, so that if for any reason we wish to apply a little heat to the honey we can do so. A honey pump elevates the honey from this reservoir to a settling tank. The suction pipe of the pump does not go to the bottom of the reservoir, therefore if we are



Part of the basement showing some honey tanks, compressor, one storage room door.



Part of the extracting room showing two extractors, and the capping melter in front.



Strainer arrangement and settling tank.

using a little heat in the honey the coil cannot be exposed, for there is always about 6 inches of honey in this tank.

The settling tank is 4′ in diameter and 5′ high, and sets on a stand 3′6″ high. There is a baffle in this tank that extends from the top to within 2 inches of the bottom. The outlet is behind this baffle and a few inches from the top of the tank, where the honey flows through a pipe into an O. A. C. strainer. After passing through this strainer it continues to flow by gravity into a tank the same capacity as the strainer tank. This tank sits on the floor and is connected to a 2″ pipe which feeds the storage tanks in the basement. The reason this tank has ample size is that when the strainer is drained at the close of the day's work, there is no danger of a sudden rush of honey overflowing it even if there is already some honey backed up in it. We drain the strainer every night and wash the screens with hose every morning, so we never have trouble from plugging up. A settling tank is not essential but it does hold back the coarser particles and there is not so much refuse to wash out of the strainer.

Insuring Fine Grained Granulated Honey

At extracting time the demand is entirely for liquid honey but only a small portion of the crop is normally sold at this time. As all honey granulates and is sold in this form and accepted by the consumers in Canada, and as most people prefer a fine type of granulation rather than a coarse type, we try to give them a fine grained honey. We mix about 5% of fine grained honey into the storage tank of honey, using a mixer of our own make for this purpose. This mixer consists of a shaft with paddles on it that extends down nearly to the bottom of the tank and is propelled by a ¼ H. P. motor the speed of the shaft being cut down by reduction gears to about 50 revolutions per minute. This mixing device is mounted on a track fastened to the ceiling over the center of the storage tanks, and can be moved from one tank to another. About 30 minutes stirring incorporates the starter evenly and thoroughly through the 5000 lbs. of honey in the tank.

The honey is now filled into consumer containers and placed on a small warehouse truck and wheeled into the storage rooms where it is piled up and left to granulate in a controlled temperature of 50 degrees F., which is about the most favorable temperature for rapid granulation. Having an abundance of starter for granulation in the fine grained honey previously mixed in the storage tank, in a favorable temperature, the honey granulates with solid fine texture in a few days. We have two cold storage rooms 24 x 12 x 7 feet, cork insulated and cooled by Frigidaire coils.

The honey house being located on a side hill permits a driveway to the basement doors which are large enough to admit a truck. This is convenient in shipping out honey.

Caring For the Wet Extracting Combs

We formerly hauled the supers of wet combs to the nearest bee yard to get dried out after extracting.

(Continued on page 383)

Nosema Again

By Lloyd C. Gardner

Dr. Phillips' article, "The Nosema Problem" is certainly most interesting. At our Ohio Beekeepers' Association winter meeting, the writer included in his talk some of the experiences he had had with Nosema disease, and in his comments, Dr. Phillips briefly covered much of the same ground as in his article.

In reply, I should like to say that many of us who have been giving credit to abnormal adult bee conditions during the winter and spring months could, as Dr. Phillips has pointed out, trace the condition to poor winter protection and questionable stores. I am sure that I can agree with anything which incorporates proper packing for winter, after several years wintering both packed and unpacked bees.

Yet after many years' experience weighing on our shoulders, some of us have just cause to be alarmed and we may be justified in saying that Nosema disease is the cause of at least some abnormalities. After all, we are but beekeepers and must depend upon our laboratory technicians to keep us informed. When these reports come to us, telling us that large amounts of the Nosema organism are found to be present in the bodies of the bees sent in for examination, we, of course, must conclude that this is the cause of the trouble.

Since considerable stress has been put on proper wintering as a control for Nosema, I would like to cover the history of our Simpson yard over the past winter and to date.

The yard is located within the center of a thicket of second growth woods densely grown up with underbrush. From 10 o'clock in the morning until 3 o'clock in the afternoon, the sun shines on all the hives. A creek of running water is close by and the topography of the location is ideal for atmospheric drainage.

It is one of those so-called ideal wintering locations. However, regardless of natural protection, we pack the yard in two-colony cases, allowing four inches of leaves around the sides and bottom with no less than ten inches over the top of the hives.

Although we did not have any wintering trouble with respect to Nosema, yet the kind of stores should be mentioned. Every colony was wintered on well ripened golden rod honey (fully capped combs).

The spring build-up was ideal. No abnormalities of adult bees were noticed until after yellow sweet clover had been yielding for a little more than ten days, after which time the ground literally crawled with bees. Consequently, this yard is lowest in production of all our apiaries.

The condition was present in several of our yards but not so severely as in this particular yard, yet none of the others are as well protected as is this one.

Regardless of whether the malady is Nosema or not, a condition with which Nosema is associated is developing—here in central Ohio at least —which is exacting heavy toll of our honey crops.

If not Nosema disease, it then becomes all the more important and all the more urgent that investigation be started immediately to forestall a developing condition which indicates that eventually it may reach most serious proportions.

Delaware, Ohio

Mr. Mueller, Field Representative of The H. J. Heinz Company

Hive Arrangements in the Yard

By Charles Mraz

The group arrangement showing the compactness and convenience of the system. Notice the hives are all within a 4-foot reach in contrast to a spread of 75 feet in the row system.

As any beekeeper knows, successful beekeeping is a lot of details arranged and carried out so all work can be done in the most efficient manner. One of these small details is that of placing colonies in a yard. The universal method seems to be placing hives in straight rows, a method which looks all right, but is not by any means very efficient. It has several drawbacks; a given number of colonies cover too much space. If they are too close together drifting of bees and virgin queens will occur. Its biggest drawback is the labor required to cover the distance from one end of the row to the other in carrying out the various manipulations during the season. Hives are usually numbered down the rows and records kept in this way so if one is unpacking material has to be carried from one end of the row to the other. When supers are put on, they have to be carried all along the line and the same for taking off honey, feeding, packing and so on.

A far better system of hive arrangement is one I believe to have been originated by J. E. Crane, whom some of the older beekeepers will no doubt recall. This is the group system. Instead of being in rows, hives are arranged in groups of ten. The usual way is to have the two hives on the north side of the group face south, the three on the west face west, three on the east face east, and two on the south face south. In this way all colonies except those on the north have their entrances to the outside, leaving the inside of the group free from flying bees so all work can be done in the center of the group with comfort.

In the group system, ten colonies occupy a space of only about 16 by 10 feet. All packing material, supers, feed or any other equipment is placed in the center of the group and no colony of the ten is more than 4 feet away from the point of operations. At no point do the bees have more than three hives in a straight line. Groups should be arranged with a lane between them for the truck, to shorten distances in taking off honey.

In the group system, one can tell instantly the number of colonies in a yard. Each group has 10, six groups, 60 colonies, and so on. Also, one can tell the number of any colony in the yard even if the numbers cannot be seen. Our usual method of numbering is to call the northwest group in the yard the first group and the northwest hive in all groups the No. 1 hive. In this way hives No. 5, 15, 25, 35, and so on are always in the same place in their respective groups and the same for all the numbers. In this way it is very easy to keep track of what colony you are working on and less danger of putting down the wrong records.

Next time if any of you move or rearrange a yard, try the group system and you will be amazed at the miles of walking it will save in the course of a season. In the illustrations a yard can be seen arranged in rows, and later the same yard arranged in groups.

Middlebury, Vermont.

Arranged in rows approximately 10 hives long. Notice the long diatance from the first hive to the last hive.

This is another partial view of the same yard showing the hives ten to the row and spaced unequally.

The Food Chamber

By George W. Bohne

In discussing this subject it might be a good idea to trace the gradual and indirect approach to this practice. About the time when Langstroth made the first and ONLY real contribution to the detail of hive construction, there was a widespread scramble to "patent" many ingenious and complicated structures, about all of which have disappeared from general use while the Langstroth bee-space is still the "central structural detail" around which ALL modern hives are built.

The incentive behind this activity seems to have been "swarm control." This brought on several fundamental ideas which might be classified under three general principles, namely, providing for extra "loafing space" within the brood chamber, as in the Aspinwall hive, which was really making the brood chamber smaller for all practical purposes through the introduction of "grill work" which made "loafing" the only thing which the bees could do in a large percentage of the working area; next came the "expansible brood box" which was practically nothing more than our present system of supering, and this was quickly followed by the advocation of a larger hive, with more and deeper combs. This last seems to be the idea which we have adopted, both in the shape of larger hives and in the use of supers. However, it is now generally conceded that a large hive does not necessarily prevent swarming and we have developed several manipulatory programs—which SOMETIMES give satisfactory results—depending on the extent of the "crippling program" which we dare to inflict on our best colonies.

As we found it necessary to abandon the swarm control argument and as we wished to retain the larger "work shop," we gradually switched over to the present designation of "food chamber" OR "double brood chamber." Such a practice may well fit the convenience or necessity of SOME beemen but may NOT satisfy other operators who work under different climatic conditions.

Excluders

It may come as a surprise to some of you larger operators but there are many beekeepers who use excluders — ALWAYS — winter and summer. It is in such a system that the current idea of food chambers and double brood boxes does NOT fit—in this southern locality, and the following remarks are based on the needs and conveniences of such a system. Roughly, this means that the excluder is placed—permanently—above a SINGLE brood chamber and the supering is made to average three SHALLOW supers per hive, as these supers stay in place all through the winter. Ample winter stores are left ABOVE THE EXCLUDER and the bees find many warm days in which they can carry new supplies down to meet their winter needs. The FOOD CHAMBER is not overlooked—but the double brood box is eliminated. The use of shallow supers is easy on the back and frequent extractions serve fairly well to provide adequate storage space. The queen being below makes it a simple chore to take off filled supers without the work of locating the queen and this also prevents the use of newly extracted combs for brood rearing purposes. Harvesting can start as much as sixty days earlier than if the queen were above. When the double full-depth brood chamber is in use, the bees utilize this room FIRST and either crowd themselves into a swarming mood or make their first super operations come along in July instead of in late February or early March. That this "misplaced" food supply is all that is necessary, down in this section, is evidenced by the fact that we have FED NO SUGAR since the days of World War No. 1. Our package shippers have a very different proposition and most of them are experts in meeting their requirements and necessities. The excluder question seems to center around the use of shallow supers, and as we have found them to our liking we will continue their use regardless of what others think on the subject.

We have one more excluder argument. We do 99% of our yardwork without the use of a veil—and with very little smoke. Our reason is failing eyesight and not mere brava-

do. We have found that bees usually resent intrusion into the brood chamber more vigorously than they object to our manipulations above the excluder—and WITHOUT AN EXCLUDER the whole hive is broodnest. We have handled many colonies in which the brood was confined to two or three central combs, pyramided from the bottom board to the cover and we had to fight for every comb which we wished to extract. The old saying of "Use your head and save your back," may be sound advice, but it sounds better when we say, "Use an excluder and save your sunny disposition."

Local Conditions

We seem to have some resources of pollen available all through the year and the scale hive often shows SOME nectar storage during ten months—sometimes more. Our winter losses are small and come, mostly, from queenlessness or starvation, as some of our operators always extract too closely.

Our spring buildup is usually quite slow and is made on the early flows which seems to reflect our own southern lack of energy, the bees seeming to realize that our flows are LONG AND SLOW—so, "What's the hurry?" Package shippers are facing a different proposition—SO THEY FEED—and get brood rearing stimulated to provide bees for their early orders. Under these conditions we honey producers get a few swarms early in the season, before our main and steady flow comes on. This swarming is stimulated by our usual spring rains, but just as soon as the weather settles, swarming stops, and it is a common sight to see bees clustering in front of the hives in June and July without showing any inclination to swarm—even when they are honey-bound. Of course, a bit of extracting done just at this time provides room for further activity and usually insures a larger yield.

How Does It Work?

Under date of May 14, 1941, we made a tabulated comparison of a scale hive record and actual yard production covering a period of ten years. This scale hive had been operated in cooperation with the Baton Rouge Field Station. We would like to impress the fact that our scale colony was no PETTED FREAK built up to make a record—just an ordinary colony whose principal value lay in its reflection of general yard conditions. This tabulation and some of the remarks made in the letter of transmission, follow:

Scale Hive	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Gains	238.5	236.0	131.0	179.2	121.0	74.0	148.0	287.5	278.0	165.0
Losses	36.0	54.5	95.5	57.7	74.5	57.0	94.5	102.5	32.0	41.0
Net Gain	202.5	181.5	35.5	121.5	46.5	17.0	53.5	185.0	244.0	124.0

Year	Colonies	Production	Average	Hours of Yardwork
1931	54	9400	174.0	74
1932	60	12360	206.0	91
1933	65	7032	108.2	62
1934	80	8264	103.3	34
1935	90	6048	67.2	27
1936	97	7848	80.9	14 to June
1937	94	9729	103.5	
1938	123	32840	267.0	
1939	130	17160	132.0	
1940	103	13300	129.1	
Totals	896 Hives	123981 pounds	138.37 Average	

The notations on this report were as follows:

"I might add that my bees have NEVER been really worked in a businesslike manner. During my County Agent days I had no time to do real work. I used to keep track of the hours devoted to yard work (all of them stolen from my roadwork time) and I tabulate these up to the time of my retirement. Now I do more work, but not nearly enough as I am not physically able to do any amount of lifting and often have to delay yardwork until such time as I can get a 'strong back' hired to help. These hired hands are nearly worthless as they usually profess fear of the bees and the net accomplishment is small.

"My strong point was in marketing and this is evidenced by the fact that my NET PROFIT from 1931 to 1940 was $9937.97. My labor expenses were so small that the wax about covered them. However, my data on this phase cannot be easily tabulated.

"You will note that the profit per

(Continued on page 383)

Honey, Sweet and Good

By Mrs. Benj. Nielsen

Peach Brown Betty.—Photo courtesy National Biscuit Co.

Long ere these lines reach print most of us folks, weather conditions being favorable, will be reveling in using the fragrant golden sweetness of the new honey crop; eager to find new and different recipes in which to use this delightfully flavored sweet. The fruits now ripening in abundance, sweetened with new crop honey make a happy combination. The natural sugars of both blend (even without stirring) to produce taste treats that no existing words quite adequately describe. Lightly drizzled over fresh fruits, and given time to mingle and merge, or skilfully used in cooking combinations—either will add new laurels to your wreath of culinary fame. The rumored sugar cut holds no terrors for the honey-minded cook! No, indeed!

Vegetables properly treated with honey assume a new and interesting flavor note, too. So if your family is a bit vegetable shy, so to speak, why not try the two vegetable recipes included this time. Do not warn them beforehand. Just fix 'em, serve 'em, and see what happens. May they encourage you to experiment with other vegetable and honey combinations.

Before giving you the recipes this month, I have a question or two and a request. What kind of recipes do you like best to have on our food pages? What kind of articles do you find most helpful? Why not drop a line or two—a postcard will do—to let me know what you would like. Perhaps you have a special problem, need a particular recipe, or have some little helpful tip on using honey that you would like to share with other readers. Please send your requests and suggestions to Mrs. Benj. Nielsen, Aurora, Neb. I'll be looking for them.

And now for the recipes:

Two cups Nabisco Honey Maid Graham Cracker crumbs, 2 tablespoons melted butter, 2 cups fresh, sliced peaches, 1 tablespoon lemon juice, ½ teaspoon grated lemon rind, ⅓ cup honey and ½ cup water.

Honey Peach Brown Betty

Mix the Nabisco Graham Cracker crumbs with butter. Sprinkle a layer of crumbs in the bottom of a greased 1½ quart baking dish. Cover crumbs with half the peaches. Sprinkle with half of the lemon juice, lemon rind, and honey. Cover with another layer of crumbs. Add remaining fruit, lemon juice, lemon rind and honey. Pour on hot water and cover with remaining crumbs. Bake in moderate oven, 375 degrees F. for 30 minutes. Serve warm with honey orange sauce. Serves 4.

Honey Orange Sauce

Grated rind of ½ lemon, 1 tablespoon lemon juice, ½ cup orange juice, 4 tablespoons honey, ¼ teaspoon salt, and 2 eggs, separated.

Combine grated lemon rind, lemon juice, orange juice, honey and salt. Add beaten egg yolks. Cook until thickened. Remove from heat and fold in stiffly beaten egg whites. If desired, two or three whole cloves may be added to the sauce as it cooks.

Sweet Peach Patsy

One and ½ cups sifted flour, ⅓ cup honey, 4 teaspoons baking powder, ½ teaspoon salt, ⅓ cup shortening, ½ cup Kellogg's All-Bran, 1 egg, ½ cup milk, 2½ cups sliced peaches and ⅔ cup peach juice.

Sift flour, baking powder, and salt together. Cut in shortening. Combine bran, beaten egg, milk and honey and let stand five minutes; add to dry ingredients, stirring just until liquid and dry ingredients are combined. Arrange peaches in greased baking pan, add juice. Drop batter by spoonfuls over peaches. Bake in moderately hot oven, 400 degrees F., about 35 minutes. Cut and serve warm with thin cream. Yield: 12 servings (9x9x2-inch pan).

Honey Peach Cream Pie

Two eggs, ⅓ cup honey, 6 tablespoons flour, ½ teaspoon salt, 3 cups milk, 1 tablespoon butter, 1 teaspoon vanilla, 1 cup sliced peaches and baked pastry shell.

Beat eggs well and place in top of double boiler; add honey, flour, and salt mixed together; then add milk; mix well. Cook over rapidly boiling water until thick, about 10 minutes, stirring constantly. Remove from heat; add butter and flavoring. Cool to lukewarm. Place sliced peaches in bottom of baked 9-inch pastry shell; pour filling over peaches. Chill. Serve plain, with additional sliced peaches, or with honey sweetened whipped cream.

Honey Fruit Sherbet

Two cups unsweetened pineapple juice, 1 tablespoon Knox Sparkling Gelatine, 1 tablespoon lemon juice, 2 egg whites and 2 tablespoons honey.

Soften the gelatine in ¼ cup pineapple juice and dissolve over boiling water. Mix remaining juices and gelatine; chill until thick. Whip until frothy; fold in egg whites beaten stiff with the honey. (Beat egg white until stiff, then beat honey in gradually.) Pour into refrigerator tray; freeze. When partially frozen, beat well, return to tray and freeze until firm. Garnish with strawberries.

Orange and Honey Ice Cream Dessert

Three large oranges, 1 pint honey vanilla ice cream (July Gleanings) 2 egg whites and ⅓ cup honey.

Wash and cut oranges in half crosswise, carefully remove segments, cut away all membrane from shell. Replace segments and chill. Top with honey ice cream; cover with meringue made by beating the egg whites until stiff, then adding the honey gradually and continue beating until mixture will hold peak. Set oranges on several thicknesses of heavy paper spread on baking sheet. Place in hot oven and brown meringue lightly. Serve at once.

Honey Apple Slices

Three-fourths cup honey, ½ cup water, 6 large cooking apples, 1 cup milk, 1 tablespoon cornstarch, 1 tablespoon butter, 1/8 teaspoon salt, and ½ teaspoon lemon extract.

Combine honey and water in saucepan, cook until slightly thickened, stirring frequently. Peel, core, and quarter apples. Cook in the honey syrup until apples are tender, about 20 minutes. Remove apples, saving syrup. Gradually add milk to cornstarch in top of double boiler; cook until thickened, about 8 minutes, stirring frequently. Add honey syrup gradually, stirring constantly; cook 10 minutes longer; add butter, salt and flavoring. Pour hot or cold sauce over apples. Serves 6 generously.

Honeyed Beets

Six medium-sized cooked beets, 4 tablespoons butter, 2 tablespoons flour, 2 tablespoons honey, ½ cup water and ⅔ cup mild vinegar.

Cut beets into ¼-inch strips. Melt butter in saucepan; add flour and honey, stirring constantly. Gradually add water and vinegar. Cook until slightly thickened, about 8 minutes. Add beets and continue cooking until beets are thoroughly heated. Serves 6.

Honey Lima Bean-Sausage Casserole

Two cups cooked lima beans, 2 teaspoons of salt, 1 bud garlic, optional, 1½ pounds link pork sausage and ½ cup honey.

Fresh or dried lima beans may be used. In either case cook in salted water until beans are tender, saving juice. Rub surface of 3-quart casserole or baking dish with garlic (may be omitted if garlic is objectionable); add beans. Arrange sausages over top of beans; drizzle with honey. Add bean liquid to just cover beans but not the sausages. Bake in moderately hot oven, 375 degrees F., about 35 to 40 minutes, or until sausages are thoroughly cooked.

Honey Peach Patsy.—Photo courtesy Kenyon & Eckhart.

From the Field of Experience

SELECTION OF BREEDING STOCK STILL IMPORTANT

By R. E. Newell

There have been several articles in the bee journals regarding rearing queens from colonies that have developed queen cells through the simple formation of nuclei, using these for stock. Nothing was said about the history or production records of this stock. If one is satisfied with a swarming strain of bees and is willing to spend half his or her time cutting out cells or using other swarm preventive measures such a system may be satisfactory. Good queens can be raised in this manner **of the above type.**

The authors of these articles have a reputation of being good beekeepers, and I am quite certain that they are careful of the breeding stock they use but have neglected to say it. It is still a good rule to raise queens from your best colonies. Such a colony should show a rapid build-up in spring, be reasonably gentle, and build brood from the bottom bar to top bar of the frames. A good colony should stand crowding of the hive without building swarm cells. While it is always a good policy to have plenty of super room, a colony that starts swarm cells when there is plenty of space for honey above and brood below, should never be used as a breeder. A colony should not be a loafer. A colony that loafs through a honey flow when other colonies are bringing in honey and will not work the minor honey sources during times of scarcity but prefers to cluster in the brood chamber or over the outside of the front should never be used as a breeder.

A colony that supersedes its queen during the spring build-up period should be used with caution, unless the queen is old, and the old queen continues to lay until the young queen is laying. Such supersedure is desirable, but when the bees supersede their queens when they are laying normally and for no apparent reason and kill the old queens before the young queens are laying, this causes a delay in egg laying that is very harmful to colony build-up and shows up in the amount of surplus honey produced.

While color of the bees might be considered as a factor in selecting breeders, too much stress should not be given to uniformity of color when production of honey is desired.

There are many other minor factors such as building of burr comb and building of surplus drone comb below the frames, etc. The most important factor is honey production and queens to be used for breeders should come from such stock and not from any colony that produces queen cells convenient to use. In making up divisions or nuclei for increase or producing queens to requeen colonies of medium or poor quality it pays good dividends to see that cells from the best colonies in the yard are always used. If such a policy is continued over a period of years, you will find that you will not be required to go over the brood chambers every week to remove queen cells, and the necessity for clipping the wings of the queens will assume minor importance in swarm control.

If your present colonies appear to have a combination of all the undesirable qualities by all means purchase queens from some of the best queen breeders. In buying queens or cows or what have you, do not let the price factor trouble you but pay the price of the breeder you consider reliable, and think nothing of it. The queen of the colony is still the queen, and she is the most important individual in the colony. Without good queens, the finest hives and combs of all worker cells will not produce a crop of honey. If all beekeepers would remember this colony production would be greatly increased.

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FORMER DEPUTY OHIO BEE INSPECTOR WRITES C. A. REESE

"I did not see many bees in Africa as there wasn't much of anything for them to work on. As for the Tunisian bees, from what I saw of them I doubt if anyone could tell them from our wild bees around home. In central Tunisia a native had several colonies. The hives were made of bamboo (or something which looked like it) woven in a hexagon shape about four feet long and a foot in diameter. These were the bees that looked like our wild bees. Then on

Cape Bon I saw a few working in a field. There were two types, one looked like the ordinary Italian bee and the other was the same size but the color of Carniolans.

"In Algeria the only bees I saw were near Algiers in a small clover field (the only clover field I have seen anywhere over here). I picked up three or four bees to look at them, and upon releasing them, they flew about two feet in front of me on a flower and began working. They didn't seem to be disturbed in the least. They looked like a good Italian and were working very hard. In Sicily I saw one colony and here I saw six or seven in one location. They all looked like the average Italian bee. I don't think there could be many bees here and would not know what they would work on besides fruit bloom.."

Cpl. Edwin Taylor
35036457
L. W. Reporting Co.
582 S. A. W. Bn.
APO 650, New York, N. Y.

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ONE MAN'S OPINION
on Queen Supersedure

Those of you who read this column (if there are any of you) will remember that I frequently squawk to the effect that faulty observation or misinterpretation of observations is responsible for many beekeeping errors.

All right, this might be either a faulty observation or a misinterpretation of an observation. Do with it what you like. I wish that I could carry it further, but the limited facilities at my disposal will not permit anything but the possibility of a continued misinterpretation. Somebody with a fairly big outfit should try it, preferably over a period of years, with enough colonies to prove whether the answer is yes or no.

It has to do with the nuisance and money loss of excessive supersedure of package queens, particularly those received in the early spring. Standard practice has been to hive them on drawn combs of honey and pollen. That sounds like good common sense, but the bees might not reason as we do.

Supposing we hive them on drawn combs and feed them sugar syrup or honey, but don't give them any pollen in the combs. Instead, feed them pollen in candy, or in one of the other ways of feeding pollen substitutes in the hive.

I think that when you hive them on combs of honey and pollen, the bees see a hive in the condition that it should be in the middle of summer, but with many empty brood cells. Because everything is in order and there are many empty cells ready for heavy laying, they think that the queen is holding out on them so they give her the air.

When you hive them on drawn combs and honey or syrup, you have the natural condition after a hard winter. There is no pollen available, so the bees don't expect the queen to lay heavily. But the pollen in the candy, or the artificial pollen that you feed comes in s l o w l y enough so that the queen can get into heavy laying condition before the bees think she is not up to their standards.

In other words, when the bees crowd the queen to lay, they supersede her because she is not up to what they think she ought to be. When she tells them in bee language that they had better get a move on and bring in some pollen if they expect her to do her stuff, then they are satisfied, work twice as hard and think that she is grand.

When I started to keep bees, I never had any supersedures with package bees. So long as I was building up, I had no trouble. But when I had a nice stock of drawn combs with both honey and pollen, I began to have supersedures.

This year, because I was afraid of poisoned pollen left over from last year, I started three packages on drawn combs with honey, but with no pollen. Plenty of fresh pollen was available in the fields when I got the packages, so I did not feed substitutes. To date (this was written June 11) there is no sign of supersedure, but the bees are building up nicely.

This might be just a freak of nature, or it might be due to weather conditions, luck, the strain of bees, their condition after the journey, or any number of other governing factors. But, frankly, I think that it is the queen crowding the bees to keep up with her. If they should supersede later, I will be convinced that the method has merit.

SECOND GLANCES

By C. M. Isaacson

A heavy rain is disconcerting to say the least, when one is busy supering during a honey flow—especially when only a short flow is expected. But to make the best of anything is only sensible, so home I came to write this month's notes.

Swarming! Always a pertinent discussion in season, and always a problem (p. 313). Mr. Morse mentions many points to keep in mind when working towards a solution. It is very true that if one can nurse colonies **well into** a heavy flow, the swarm fever largely leaves. And good queens, rather than merely young, are the big factor as regards queens. Clipped queens, reversing, plenty of room in time, all help. But as to removing **sealed** brood as a preventive, I am "from Missouri". I have found that only by removing **all** brood can be depended upon as really safe.

And one word as to the why of Demareeing's effectiveness—is it not because the raised brood spreads the working force and leaves the **brood chamber** less crowded?

Wax moth control by use of methyl bromide would seem to be desirable because of its several advantages over comparable materials—chief among them being its ability to destroy the eggs as well as larvae. Mr. Townsend gives clear directions as to its use by his well written text and photos, and the article should be filed for reference when needed (p. 315).

Nosema is not serious. That seems to be the gist of Dr. Phillip's article and a conclusion that many will probably take exception to. But, as he points out, all other factors which might contribute to any unusual loss should be carefully checked before full blame is placed on nosema. In my own yards, I have frequently had fairly heavy nosema infestations of individual colonies without apparent damage. Just a word though — Dr. Phillips places emphasis on the connection—mistaken—between this disease and the damage by poor wintering methods. But what about the reported summer damage which Mr. Gardner reported in the May issue? If not nosema, just what was the cause of this loss?

War reaches deep. John Conner is a name familiar to Gleaning's readers, and we all share the hurt of his loss. His persistent advocacy of the top entrance was probably a big factor in the increasing use of some sort of upper opening for winter (p. 319).

Uniting a nucleus with a stronger colony is not a difficult process when some sort of honey flow is on. Perhaps Mr. Miller's failures in midsummer were during a dearth of nectar (p. 322). I do it many times a season, often using only smoke.

A. F. B. resistant stock still has too many limitations to be suitable for general use. Mr. Hambleton's mention of their susceptibility to European foulbrood is one (p. 323), and the prospect of rapid deterioration in resistant qualities after several supersedures an even more serious objection to my mind.

Fear of weakening of a colony through getting stung too much by ugly inmates is a new one on me (p. 325). I suspect Spinster Jane of just a **little** humor now and then. But it is a good idea to requeen cross colonies, especially in cases where they can be a nuisance.

Queens for packages. As he so often does, J. L. Byer puts his finger on the real problem in the bee shipping business (p. 329). As he points out, no matter how many bees pollen feeding can produce, the determining factor still is the production of **good** queens. A few bees are enough, with a prolific queen.

Clover is scarce. The editorial on page 333 states a condition becoming all too prevalent—with less and higher priced seed and the seemingly increased difficulty of obtaining a good "catch", much less clover is being seeded in many localities. More bees for better pollination and consequent bigger seed crops would be a big help here.

"Too much honey"? Editor Deyell is right (p. 335). It is really amazing how a strong colony with 12 to 15 frames of brood will use up that abundant honey. Too much is better than too little—always.

The honey crop will soon be in, little or much. When it is sold, remember how much harder that selling at a fair price was a few years ago—and mail your contribution to the American Honey Institute. None of your dollars will pay you better.

Middle River, Minn.

Just News

The Bronx County Beekeepers' Association will hold a field day with a corn roast picnic and basket lunch, commencing at 1:00 p. m., Sunday afternoon, August 13th at the Edenwald Apiaries of Mr. Henry Kroger, 3661 Eden Terrace, Bronx. A warm welcome is extended to all beekeepers. Bring your lunch basket and enjoy a good day among the beekeepers of the Bronx. — Harry Newman, Sec.

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A two-day short course on beekeeping will be held at Clemson College, South Carolina, August 9 and 10. We will be more than glad to welcome those from out-of-the-state.—E. S. Prevost, Extension Bee Specialist.

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The Vermont Annual Beekeepers' Association meeting will be held Saturday, August 26, 1944 starting at 10 a. m. at the Vermont State School of Agriculture, Randolph Center, Vermont. Mr. Phil Hodgdon, instructor of beekeeping and horticulture will give the principle talk. All beekeepers, their friends, and families are invited. Remember to bring lunches. — Charles Mraz, Sec.

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The Wyoming-Livingston County (New York) Beekeepers' Association will hold its summer meeting and picnic at the home of Prof. Guy A. Bailey in Geneseo on Saturday, Aug. 26, 1944. Bring your picnic lunch. Coffee will be furnished.—Fred G. Benedict, Sec.

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The New Rochelle Beekeepers' Association will hold its regular monthly meeting at the home and apiary of Mr. and Mrs. James A. Bailey, 18 Burling Lane, New Rochelle, N. Y., on Sunday, August 20 at 2:30 p. m. Bottling and extracting honey will be brought up for discussion. Expert bee men will be on hand to answer questions. So bring your problems as they will be of interest to all.—S. Barnes.

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Our readers will be interested to know that there will be a special article on beekeeping, entitled, "Fortune on the Wing," in the **Saturday Evening Post,** for August 12, written by Frank J. Taylor. It will feature particularly Harry J. Whitcomb, of Davis, California, a man who has 2000 colonies and 2000 nuclei. The story will not only be intensely interesting but will be illustrated in color.

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Mr. E. H. Mueller, Field Representative for H. J. Heinz Co., was a Gleanings visitor recently. The honey industry in the years to come will benefit by the interest H. J. Heinz Company is showing in honey —an interest that we believe will be permanent and extensive.

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Four important summer meetings: August 2, in Sylvania, Ohio, at Ross Wyant home; August 3, at Dr. Howard Potter's, Ithaca, Michigan; August 4 at Frank Slusher's, Traverse City, Michigan; and August 5 at Burt Lake State Park, Michigan.

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The Annual Field Day meeting of **Westmorland County Beekeepers' Association** will be held August 17 in W. L. Treager's apiary near Hunker, Pa.

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The Middlesex County Beekeepers' Association will meet at the C. E. Wilson residence on Garland Road, Concord, Massachusetts, Saturday, August 26 at 2 p. m. Our youngest beekeeper, Peter Wilson, will open the hives. Besides your picnic supper please bring your plates, cups, and spoons for coffee and ice cream which will be served with honey before the moving pictures.—A. M. Southwick, Pres.

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THANKS A THOUSAND TIMES

Letters of greetings and congratulations on the degree of Doctor of Laws conferred upon me by the Ohio State University have been pouring in day by day to such an extent and volume from beekeepers, bee associations, and from scientific men from all over the country that I am overwhelmed. This honor, coming unsought and unexpected, is no less appreciated.

To you, dear friends, one and all, I say a thousand thanks. But when you see me, call me "E. R.", as before.

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The annual Red River Valley Beekeepers' picnic will be held at Crookston, Minn., in the park on August 6.—H. A. Sundean.

From North, East, West and South

SOUTHERN CALIFORNIA, July 2

Weather: June in Southern California was like May, too cool for honey. Blankets felt good at night. It has been said that it was one of the coldest June months and June 1st the coldest June day on record as the mercury did not go above 51 degrees that day.

Honey Crop: Southern California will have a short crop. Orange and sage, our early honey sources, as previously reported, are very short. Beekeepers have held out hope for honey from the white sage and wild buckwheat, but favorable reports from these sections are few and far between. Reports from the alfalfa in the Palo Verde and Imperial valleys are more encouraging and it will probably furnish its usual crop of from 40 to 60 pounds. While a large acreage of alfalfa has given way to other crops since the war began there still remain many fields that will keep the bees busy. The Tamarix so plentiful in those valleys is also a honey producer of considerable value. It is an evergreen tree imported a comparatively few years ago. It sprouts readily from cuttings, is a fast grower, makes a good windbreak, shade, or ornamental tree, blooms profusely in summer and has proven a great asset to the desert country as well as to the beekeeper.

Miscellaneous: Beekeepers report a considerable number of queenless colonies and neighbors call up about swarms that have alighted in their yards.

Many beekeepers who moved to the orange for the first time were very much disappointed with the amount of honey secured. Some apiaries were moved from the orange to the desert buckwheat on the higher ground only to meet with further disappointment. These were again moved after it was found the bees would not get surplus honey. Usually this low spreading buckwheat growing on our desert country at an elevation of from three to five thousand feet furnishes a satisfactory crop of good honey. Coming as it does soon after the orange it often makes a good tie-in between the orange or sage and the thistle or alfalfa, for the migratory beekeeper who moves several times during the season.

Just as we close we receive a report from the region south of us saying, "wild buckwheat is yielding nicely since the weather has turned warm."—L. L. Andrews, Corona, Calif.

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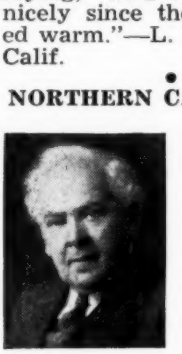
NORTHERN CALIFORNIA, July 8



Weather: Beekeepers from every section of northern California tell us that this far in the honey season the weather has been too cool. Here in the eucalyptus district where the crop is in the can the crop is short. That result is not altogether due to cool weather or the shortage of rainfall. Earlier in the season we had a terrific wind storm that destroyed many trees and where the trees were not completely destroyed great limbs and bunches of blossoms were torn off and thrown to the ground. The result is better than we expected. The crop is about 25 pounds to the colony. Our best producing sections are still to be reported.

Condition of Bees: Our package bees and queen producers have had a good season. Several report that while they produced more than any previous year they were not able to fill all of their orders. The loss from airplane dusting was great. To make up for that loss a great amount of sugar was used. One of our biggest producers who has 11,000 colonies tells us that he fed 185,000 pounds and his bees are still short of numbers.

The poison problem is settling. The users of the airplane for dusting are finding the expense too great. Beekeepers of California believe in education and cooperation. The user of the airplane for dusting has learned in his investigation that bees are valuable to him in his crops. The beekeeper can be of great assist-

ance to the farmer by helping him to know bees better. Radio and newspapers want to know more about bees and honey. Now is our chance to help win the war by helping others.

Miscellaneous: This is the season of moving bees from one honey crop to another. The question of open or closed entrances still comes up but it is plain to be seen that the majority favor open. A successful plan is to go to the yard with your flat bottom truck just before dusk when the bees are nearly all in. Fifty colonies of two stories makes a good load. The trouble is shortage of help. In beekeeping, like every other industry, women are doing a full share. So of three helpers one may be a woman. She takes the smoker and puffs two or three puffs at the entrance and her job is done. The two men pick up the hive and carry it to the truck. The bees all on the truck and the ropes tied down requires about 30 minutes. There must be plenty of gas for the truck will not stop until it reaches its destination. Reaching the field the helpers get up early the next morning and unload the bees. They find them quiet and little inclined to sting.—Cary W. Hartman, Oakland, California.

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TEXAS, July 5

The weather for June gave a horsemint honey flow from the middle of May through June and a living is still coming from the field. Many beekeepers report average yields and some as low as one half of the average, but all agree in reporting their colonies have stores for the winter after a light crop had been taken.

As in many states Texas beekeepers are learning to adapt their beekeeping to new sources of nectar, thus prolonging the honey gathering period. The results so far indicate that the colonies can go into winter with ample stores collected after an average crop has been removed in June.

An interesting observation is that in southern Texas the scale hives show the honey collected for the day comes in after five o'clock in the afternoon. This agrees with the statement of Cresson made years ago, that differing from humid zones where flowers open and pollination occurs in the early morning, in arid and semi-arid zones, pollination occurs late in the day and that nocturnal pollinators occur in all orders of insects.

Miscellaneous: The beekeepers of Texas extend their congratulations to E. R. Root. Never has an educational institution conferred a doctor's degree on a more deserving candidate. Wherever beekeeping is known he is the authority and in the field of literature he is an author and editor without a rival.

Nature moves slowly but makes few wrong moves. Man produced Hubam sweet clover. It is good but has a short blooming period. Nature is slowly creating a long blooming variety and indications are for a sweet clover that will bloom through at least nine months of the year. Man must produce pollinators and a long blooming sweet clover will be an asset.

A new one appeared in a certain big town paper want ad column. "Wanted Bee Honey by the Winery. Best prices paid."

The beekeepers of Texas are proud of their representation in the services of the Nation and when travel is available without interference with duty then the Texas beekeepers will celebrate with a Victory Meeting. —Prof. H. B. Parks, San Antonio, Tex.

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COLORADO, July 7

Weather: Once more it has proved true that spring weather which is unfavorable to bee activity is the foundation of a good honey flow once summer begins. Although late in arriving summer has finally come,and with it one of the best honey flows Western Colorado has seen for many seasons. Many beekeepers already report more honey on the hives than was extracted last season.

Bees: Due to much stormy weather uncared for colonies did not build up in time to take advantage of the early flow. Where abundant stores

and a pollen supplement were provided, colonies occupied four and five stories before the main flow began and stored a super of early wildflower honey.

Miscellaneous: There has been excessive queen failure among 1944 queens leading us to believe that many inferior queens were shipped out this spring in an attempt on the part of the shipper to fill as many orders as possible. A high percentage of package queens have superseded. Many package colonies swarmed without approaching a congested condition. This has had a tendency to make results spotted. Yet, in spite of all these difficulties we are cheered by the best prospects we have faced in recent years.—John W. Holzberlein, Jr., Grand Valley, Colo.

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NORTH DAKOTA, July 8

Weather: For the most part, the season has been favorable for plants as well as for colony development. Periods of wet, cloudy weather hindered the bees in gathering and in many cases made special feeding necessary. Bees were confined to their hives a good deal but built up fairly rapidly in strength and, according to reports, swarming has been a trying problem. Heavy rainfall of late added to the beekeepers' difficulties in getting to outlying bee-yards. Nearly four inches of rain fell in this area during the first few days of July. Fields and side roads are so soaked with water as to be almost impassable. This situation, together with the shortage of help, has also hindered the work of the bee inspection service.

Honey Plants: The sweet clover situation has turned out better than was anticipated. Damage to the plants by the sweet clover weevil was heavy in places but quite spotted. Some fields, only a few miles from heavily damaged fields, showed little weevil injury. The reason for these differences in degree of field injury is not explained in the light of our present knowledge of the problem. Fortunately this weevil does not affect alfalfa, alsike or any of the other clovers.

Following the dandelion and wild fruit bloom, the yellow sweet clover began to blossom in the Fargo area on June 6. Both the yellow and white sweet clovers are now in full bloom and along with alfalfa and a few others of minor importance will provide the main nectar flow for the balance of the season. On a recent trip in the Red River Valley I noticed an increasing number of fields of alsike and red clovers being grown. The fields were in excellent condition and the bees were working the blossoms. The indications are that farmers are taking an increasing interest in these legumes and will grow more of them to help replace the declining acreage of sweet clover.—J. A. Munro, Fargo, North Dakota.

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VIRGINIA, July 8

Weather: Here in the Piedmont section of Virginia the weather has been very good until lately. Early spring was very favorable for bees to build up. It continued good until about thirty days ago. It began to get dry and it is very dry now. We had a light rain today, but too late for clover and sourwood.

Bees built up rapidly this spring. In fact they built up so fast that they caught many beekeepers doing something else besides catching swarms. This meant the loss of many swarms, therefore the loss of the early honey crop. Where the beekeepers were on their toes and prevented swarming or caught the swarms a good crop of early honey was secured.

Honey Crop: Virginia on the whole will get the best crop in many years. Many beekeepers will average 80 pounds per colony, which is good for Virginia. If the hot weather had not dried up the sourwood bloom 100 pounds would not have been rare. Some beekeepers have started extracting. The honey is of a very heavy body and has a fine flavor. In most cases it is being sold as soon as packed. The honey container situation is bothering some beekeepers. We had gotten used to the 5-pound square glass jar. These we cannot secure any more. —H. W. Weatherford, Vernon Hill, Va.

MANITOBA, July 6

Weather: What a headache this season has brought us. We started with splendid shipping weather in April and early deliveries of package bees arrived in ideal weather. Then a sudden burst of heat caught the later deliveries and there were heavy losses.

Then June brought floods of rain that raised the rivers and high waters caught several apiaries. Some had to be moved and trailed through the mud on tractor drawn trailers. July started with grand weather for swarming and reports of excessive swarming are coming from all directions.

Honey Plants: There is one bright spot in the picture. This is the time in ordinary years when sweet clover is cut or ploughed down as it stands. The beekeepers are now smiling as the fields are so wet the farmers cannot get machinery in the field. Most of the fields are covered with a grand crop of yellow sweet clover in full bloom but low strips in the fields hold enough water to keep the machines idle. Just what will happen later depends on the weatherman. Perhaps much of this clover will be left to go to seed.

At this date, July 6th, white sweet clover is reaching the stage where the bees are working it. A report of an increase of twelve pounds in a day for a hive on scales came in yesterday.

Inspection: This has been a very difficult season for inspectors and reports of impassable roads have kept them close to hard surface if they are to keep going. So far the disease situation is first-rate and no discovery of large proportions has been made. Delays in securing car repairs, necessary tires, etc., have also caused some loss of time. These things must be met patiently and there is nothing gained by trying to hurry the officials. A ruined inner tube means a lost day before it can be replaced.

Here's hoping this war will soon be over so we can get back to normal.—L. T. Floyd, Winnipeg, Man.

ONTARIO, July 7

Weather: Someone has said that farming is gambling with the weather. If this be true, some superlative adjectives would be necessary to properly qualify the element of chance entering into beekeeping. We have bees in four counties of Ontario, and two weeks ago prospects for honey appeared similar in all four places. Today, July 7, in company with one of our boys, the writer has just returned from Victoria County where four apiaries were looked over and many colonies given more supers. A real honey flow is in progress and bees are almost literally calling for more room. Two of our family were in Wenthworth County where we have two apiaries. On their last visit to these apiaries conditions looked rosy, but tonight they brought back the supers taken with them. A bad drought had completely changed things and although we have had no rain for two weeks here or in Victoria County, the much greater amount of moisture in the soil at these latter places seems to have made the difference in nectar secretion.

Crop Conditions: Primed up by the good flow at these apiaries, we were all ready to send in a really optimistic report regarding Ontario's honey crop for 1944, but thought best to get in touch with the Ontario Honey Producers' Association first. To my surprise and disappointment we learned that the drouth is very serious to beekeepers in a major part of the Province, particularly so in the east. So all we can say at this date is that we are getting a good flow in the counties of York, Ontario, and Victoria. The season is not late and early rains might make a change, yet the effect of a very dry spell is apt to affect not only this year's crop but next year's as well.

Basswood trees have a heavy bloom this year and it is just starting to open. A negligible source of honey in many districts, it may possibly help out in places where the trees are still plentiful. The best crop of basswood we ever obtained in last 50 years, was during a drouth when clover was all dried up. Buckwheat acreage is not large this year

as we had a favorable spring for seeding and that always means a small amount of buckwheat sown in good farming districts. However, we noticed today that there will be a lot of buckwheat in Victoria County near our bees.

Bees are generally in good shape aside from an unusual amount of queens, both old and young, being superseded. In our 29 apiaries, bees wintered in two full-depth bodies, in single bodies plus a shallow food chamber, and in single brood chambers. All wintered well and less than a pound of sugar each was fed to wintered-over colonies. Today we can see no difference in strength of all these bees no matter if wintered in one or more hive bodies. Believe it or not, our very strongest dozen or so colonies in an apiary that is exceptionally strong are packages installed about April 20th and well cared for.

Miscellaneous: No matter how bees are wintered, in one hive body or half a dozen, we find that a colony always reaches its peak at a certain time, and our aim is to have this peak reached as near the opening of the major honey flow as possible. We have had almost no swarming to date and rarely have any trouble in that line. We have no system, so-called. If colonies are wintered in single brood chambers, and most of our bees are, as soon as they are strong enough a second body of combs is given with no excluder given at that time. When this second body is well filled with brood and honey, the queen is put below and the excluder keeps her there for the balance of the season. More room is given and the body of brood and honey raised above the empty super. We try to examine it ten days later or earlier to cut out cells that will be raised in this super thus hoisted, and that is all we do.

No change as yet in rationing regulations and I am afraid if the crop is none too good that no change will be made. If a bumper crop was in sight some change would have to be made to move the honey, but if the crop is light that will be advanced as a reason that rationing should not be eased.—J. L. Byer, Markham, Ontario.

American Honey Institute News Notes

By Mrs. Harriett M. Grace, Director

If one pays a high price and gets quality, he soon forgets the price, but when one pays a high price and receives poor quality, he does not forget. An item of quality pays dividends for years to come.

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Two amusing incidents happened to the Director of the Institute within an hour today. As she was on her way home from the office, a man stopped her and said, "Pardon me, but that pin you wear on your blouse l o o k s real enough to be alive." He then said, "Good gracious, it is alive." It was a real live honey bee.

She then stopped into a store to buy kidney for her pet cat. As she stood in line at the cashier's counter, she noticed that an attractive young couple just ahead of her had purchased a five-pound jar of honey. The man held the door open for Mrs. Grace. She thanked him and said, "I should like to send you a honey recipe book." The man and his wife just ignored her. As she walked along she said to herself, "Well, it is good enough for me. I am too friendly. This will be a lesson for me." Just then the couple passed her and she observed that they were using the sign language.

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Pleased customers always come back while displeased customers do not.

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At a recent session of the United States Farm Chemurgic Conference it was stated that a process for the manufacture of syrup from wheat has been perfected, and that commercial production at the rate of a million pounds per month is under way.

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If enough honey can be secured, it may be used as a vehicle for vitamins by a pharmaceutical establishment.

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An item in Food Field Reporter states that Deaeration would aid the processing of milk, honey, and catsup.

SIFTINGS—from various sources

By the Editors

Realizing that all worthwhile information on beekeeping is not found in one bee journal, we are sharing with our readers some notes gleaned from other bee journals, back issues of Gleanings, and bee books.

"Science is nothing but trained and organized common sense."—Huxley.

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"Humbugs and Swindles" is the title of a department that appeared in Gleanings during 1875. One item tells of a purported beekeeping expert who paid a visit to Lindsay, Ohio, and succeeded in getting $30.00 for teaching a class in bee culture. The instruction was all given in a single lesson occuppying only one hour and a half. The great secrets of success were said to be in printed form, but, due to an oversight, were left at home. The instructor agreed to mail a copy to each pupil—but they waited in vain. That was the last heard of the beekeeping expert.

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"Successful honey flow management is the ability to make the right decisions, not only during the flow but the year around. Good management should be as flexible as our varied conditions demand."—Bruce Morehouse, in June, 1944, Gleanings.

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"Winter losses could be greatly curtailed if beekeepers stopped putting such blind faith in heavy winter packing and gave more attention, not to **how** they packed but **what** they packed."—Jas. I. Hambleton.

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"Do you know that with the next printing of 'Old Favorite Honey Recipes' a quarter of a million copies will have been printed?"—Mrs. Harriett M Grace, Director of the American Honey Institute Office, Madison, Wisconsin, in June, 1944, Gleanings.

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"Dr. Brunnich of Switzerland kept a record of performance of his bees over a period of thirteen years with the age of individual queens for each colony. In the Bee World for 1922 he published a report of the results. Queens ranging from one to four years of age were included. The largest crops on the average were harvested from colonies headed by two year old queens. The harvest of colonies headed by three year old queens averaged about the same as one year queens. As would be expected colonies with four year old queens harvested smaller average crops, although individuals did as well."—May, 1944, Australian Bee Journal.

[It seems possible that queens under present apiary management in this country which in many cases involves practically unlimited brood rearing in large brood chambers may not live so long as did queens some years ago when egg laying was more restricted in smaller brood chambers. A queen bee is endowed with a certain amount of energy and her life should not be measured by years, but rather by the number of eggs or amount of brood she produces.—M. J. D.]

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"For unfortunate folks who wear eye glasses while working bees, in the hot sun, here is relief: Secure a cellulose sponge about one half inch thick, from the dime store. Cut this sponge into strips 1" x 4". Attach an elastic to both ends of sponge, to fit snugly over the head, with sponge over eyebrows. The sponge will soak up the perspiration and keep it from running over the glasses."—Frank F. Johnson, June, 1944, American Bee Journal.

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The July 1, 1944, issue of Farm Research contains an article, "DDT — A New Synthetic Insecticide." This deadly chemical was mentioned editorially, page 332, July, 1944, Gleanings, the fear being expressed that it might be detrimental to honeybees. The writer of the above-mentioned article says that a great deal of work has to be done before it can be recommended for use, also its effect on insects that are working as pollinators are questions which will require experimental work before enough evidence is available to make certain where DDT will fit into insect control. This information will relieve the minds of beekeepers who have been concerned over this matter.

Editorials

There Must be Nectar for Surplus The beekeeper may do his part in having colonies of bees ready for a honey flow but if conditions are not favorable for nectar secretion the maximum crop is not secured.

Conditions in parts of the clover region appeared ideal during early June. Dry hot weather began the last week of June and continued into early July. Blossoms dried up and in some areas it was a case of "parched earth." Copious rains right now (this is July 13) might revive clovers but such seems doubtful. The Dutch and alsike clovers having shallow root systems need frequent rains. Sweet clover and alfalfa having deep roots can survive droughts, unless too severe. Beekeepers in regions where the latter abounds may yet secure some surplus.

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Water for Bees During a rainy season bees can get water easily but during a protracted dry spell they may have to fly some distance unless a never failing source is near the apiary.

Bees do require water and plenty of it, especially in hot weather, for brood rearing. Locating an apiary near a permanent supply of water is a major requirement in beekeeping.

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Sugar for Bees Any person who needs sugar to feed bees may obtain up to 10 pounds of sugar per bee colony each calendar year. Under emergency weather conditions where bees cannot subsist on their natural source of nectar and the supply of honey in the colony is too small, provision is made for extra allowances of not more than 15 pounds of sugar. However, this can be obtained only by certification from the beekeeper's local U. S. Department of Agriculture War Board that the bees would be lost if not given emergency feeding. Application for sugar for bee feeding should be made to the bee owners' local War Price and Rationing Board. **(Revised Ration Order 3, Amendment 26, effective June 30.)**

Honey Production in Canada The Dominion Bureau of Statistics, published at Ottawa, Canada, as of July 11, 1944, just received, puts out the following summary of honey crop reports:

According to the revised estimates, honey production in 1943 totalled 39,492,100 pounds, which represents an increase of 11,443,400 pounds or 40.8 per cent over the 1942 crop of 28,048,700 pounds. The increase was due to a record number of colonies in 1943 combined with a higher average yield which, in spite of adverse weather conditions, was 88 pounds per colony as compared with 66 pounds per colony in 1942.

The 1943 crop sold at prices generally higher than were paid to producers for the 1942 crop, the average price for all Canada being 15.4 cents per pound as compared with 13.7 cents for the previous year's crop. The gross value of the 1943 crop of honey and beeswax is estimated at $6,371,200, an increase of $2,342,200 or 58.1 per cent over the 1942 production which was valued at $4,029,000.

Prospects at the present time are reasonably satisfactory for the current honey crop. Winter-killing on the whole was not serious and losses have been made up by replacements of package bees and a further expansion in the numbers of beekeepers and colonies. Indications are that the numbers of colonies have been increased by about 7 per cent. Weather conditions to date have been generally satisfactory, and therefore, an average or better-than-average crop can be expected.

It will be seen from the above that our sister nation to the North is rapidly forging ahead in beekeeping. An average of 85 pounds per colony in 1943 is very good indeed. Such a record is something for beekeepers in this and other countries to "shoot at."

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The Food Chamber Every hive of bees has, or should have a brood chamber. Obviously there should be a food chamber as well, as none of the single-story brood chambers in use today are large enough for the production of brood and the storage of adequate food—honey and pollen—for colony requirements throughout the season.

A few decades ago the food chamber was called the automatic feeder because it helped to obviate the labor and expense of feeding honey or sugar syrup to colonies in single-story brood chambers when nectar was scarce.

A food chamber is an extracting super (preferably a deep super) fill-

ed with honey and pollen, reserved for bee food for each colony—this in addition to what honey and pollen there may be in the brood chamber.

There are various ways of using the food chambers and the method to be used in different regions depends on conditions that obtain in those regions. The article in this issue on page 358, by George Bohne, will be read with interest as it describes a method which fits conditions in Louisiana.

It has been said that the proper use of the food chamber is the key that unlocks the door to successful beekeeping.

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"A Queen Bee Detector" We receive many inquiries as to the best method of finding queens. It seems there has been no royal road to success, no infallible rule that will work—always.

And now along comes an invention for detecting the queen bee by means of an electric device similar to a magic wand. This is described in the June, 1944, issue of "Bee Craft" published in Sussex, England, as follows:

"The secret lies in a special substance that is applied to the back of the queen, which need not be more than a small speck. The queen with her 50,000 inhabitants is quite unaware that she is sending out an invisible ray, so powerful that it can penetrate iron and steel, yet is enough to make her presence felt by the divining rod. The apparatus is not complicated, comprising the divining rod, a battery, and an earphone or loudspeaker, yet it is sensitive and one can hear the queen approaching. One would be able to tell immediately without removing the brood frames whether a colony is queenright simply by passing the rod over the broodbox"

The article goes on further to state that the invention is the result of the joint efforts of two enthusiastic beekeepers, Mr. Gilbert A. R. Tomes, television inventor and ex-BBC engineer, and Mr. S. W. Gadge. The experiments are to be continued.

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Legume Seed Situation According to the June, 1944, issue of "Southern Seedsman" some difficulty is being experienced in passing the Gillette seed and legume subsidy measure which provides payments of $3.50 an acre to encourage farmers to harvest seed of important grasses and legumes. The Gillette bill for $25,000,000 passed the Senate but was held up by the House Agricultural committee. It appears likely that $12,500,000, a "Half Loaf," may be secured.

More and more attention is being focused on the necessity and importance of growing legumes for soil fertility, especially at this time when farm crops are so necessary in food production.

It seems doubtful if the rank and file of farmers appreciate as they should the importance of bees for pollinating the legumes. If it were not for honeybees, which, according to the late Bulletin E-584 put out by U. S. Department of Agriculture, are responsible for over 80% of pollination performed, there would be practically no legume seed harvested. This fact should be publicized continuously.

A worthwhile project for state and county beekeepers' associations would be the education of farmers and those in agriculture responsible for crop rotations concerning the dependence of agriculture on the beekeeping industry.

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An Alleged Cure for Robbing Recently a beekeeper wrote us about his method of handling an apiary when robbing is prevalent. If and when the bees from other hives begin to "snoop" around hives being manipulated, he removes covers from all hives in the apiary. This, he claims, puts all colonies on a par. Colonies that had begun to "snoop" around would then be obliged to remain at home to guard their stores.

This method of handling a robbing situation may work. We have never had nerve enough to try it but may do so in the future if the occasion seems to demand such a demonstration.

Our advice is, to manipulate hives only when the bees are gathering nectar, unless it is necessary to supply bee food to save the life of the colonies.

Beekeepers in towns and villages should handle bees only when they are working well during fine weather. When bees start robbing the neighbors may get stung and that means trouble.

Talks to Beekeepers

M. J. Deyell

Beekeepers' New Year

Some years ago one of the writers referred to August 1st as the beekeepers' New Year. This seems to apply to the northern hemisphere and not the southern hemisphere where the seasons are reversed. August 1st marks the end of the year's honey crop. Those in the North who plan to carry colonies through the winter should certainly give attention to the important requirements in apiary management, which if put into practice, help to insure success in wintering and securing the maximum crop.

The one who coined the phrase had in mind the necessary preparations in the apiary for securing next year's honey crop. These requirements seem so simple that we wonder, at times, why it is necessary to emphasize them so often. They are (1) an abundance of food of good quality—honey and pollen for each colony; (2) a good queen for each colony; (3) ample comb space for the queen to produce a large colony of bees; and (4) adequate protection against the elements.

If all of us beekeepers would do what we know we should do in apiary management we would secure more surplus honey which seems to be the main objective in beekeeping. Some of us take some things for granted and assume conditions in the apiary are favorable, when, as a matter of fact, if we did some investigating we would find that there are some abnormal conditions that should be rectified.

Spring Apiary Management Should Begin in the Fall

It is interesting to note that the four requirements mentioned should be observed early in the spring as well as in the fall. I am mentioning them at this time so that intelligent plans may be laid for fulfilling all of the requirements in plenty of time, beginning this month.

An Abundance of Food

It is difficult to give specific instructions because conditions vary in different parts of the country. In some regions there is a fall honey flow. In other regions the bees make a scant living after harvesting the summer crop. In regions where the summer honey flow constitutes the major source of nectar, it is necessary for the beekeepers to retain enough honey for fall, winter, and early spring food. As a matter of fact, in regions where there is a summer honey flow, also a fall flow, it is well for beekeepers to reserve enough winter stores for each colony in the food chamber until it is found that the fall honey flow materializes.

A number of years ago I was talking with a beekeeper in a buckwheat region. It so happened that this beekeeper secured some white honey from clovers that season. He said that he planned to extract all of the white honey and then reserve a food chamber of buckwheat honey for each colony. I said to him: "but you haven't yet secured the crop of buckwheat honey." He said: "No, but I am going to get a crop."

A few weeks later I met the beekeeper again and he told me that the buckwheat flow did not materialize and that he did not have his food chambers well filled with honey. In this connection I thought of the old saying: "A bird in the hand is worth two in the bush."

Now it is obvious that ample food for winter and early spring is one of the most important requirements for successful wintering. In fact, it may be said that this is the **most** important requirement. In this connection, I would like to emphasize the fact that the food chamber should be completely filled, if possible, with honey, in addition to a considerable amount of honey in the lower brood chamber. If the deep food chamber is used there is likely to be an adequate amount of honey. If the shallow food chamber is used there may, or may not, be enough food to last until nectar is available

in quantity the following season.

In regions where there is a late heavy fall honey flow, the shallow food chamber seems to answer the purpose quite well. But in regions where there is little if any fall flow, the deep food chamber is certainly needed.

A Good Queen for Each Colony

We are frequently asked whether or not is it advisable to requeen annually. It now seems to be the concensus that some queens do as good or perhaps better work during the second year than they do the first year. In other words, some queens appear to get their stride at the beginning of the second year. Here in Medina we do not make a practice of requeening annually as we once did, but, rather, we requeen when old queens begin to fail.

We have observed, especially in our yards in Western Ohio where colonies are operated in double brood chamber hives, that a large percentage of the queens, perhaps 75 or 80 per cent, are superseded during August and September. We have observed also that queens produced under the supersedure impulse are of good quality, provided, of course, the stock is desirable.

I have talked with quite a number of commercial producers in this country and Canada and have found many of them depend upon the supersedure impulse for requeening.

Why Good Queens?

Obviously they are needed to produce populous colonies to go into the winter quarters. Such colonies consisting mainly of young bees winter well, provided they have adequate food and protection. Queens should be sufficiently vigorous to carry on during the next season, especially the spring months prior to the major honey flow, when they are called upon to do very heavy egg laying.

This matter of maintaining a good queen in each colony throughout the season is one of the biggest problems to be faced in beekeeping today. Unfortunately some queens purchased from breeders do not give the service that beekeepers should reasonably expect. There is much to be learned about the rearing of genuinely good queens. Possibly one reason for poor quality queens is the fact that in the production of queens commercially conditions with respect to nectar and pollen supply are not normal throughout the season. Just how queen breeders are going to produce good quality queens throughout the season when parts of the season may be unfavorable for growing queens remains to be found out. Obviously, the pollen supplement idea being worked by Dr. C. L. Farrar at Madison, Wisconsin, may have to be used in parts of the South in the near future.

And so, the two main requirements for successful wintering—an ample amount of food and a good queen for each colony—should be planned for during this month. It is possible, of course, to introduce queens during September and early October, but it seems preferable to get young queens introduced and laying, if possible during August.

The third requirement, **ample comb space** is necessary when and where a heavy honey flow occurs during the fall months. Supers should be given in ample time.

The fourth requirement for successful wintering—adequate protection—will be taken up in a later talk.

Remove White Honey Before Dark Honey Flow Begins

In regions where buckwheat is grown, it is quite necessary to get the white honey off the hives in time to prevent having it mixed with dark honey. During warm, dry weather honey is cured or ripened by the bees soon after it is stored in the comb. When wet muggy weather prevails, it is more difficult for bees to drive off the excess moisture from the nectar. In some instances, especially when wet weather prevails, honey is removed from the hives too soon and consequently it ferments or sours, either in the comb or after it has been extracted and put into cans. We tell beekeepers to leave honey in the hives until it is three quarters capped over. However, this does not always mean that the honey is thoroughly ripened.

Section comb honey should be removed just as soon as all of the sections are capped over. If it is left on the hives too long it may become travel stained and thus made unfit for fancy or No. 1 grades.

Equipment for Extracting

A small two or three frame extractor is large enough for the be-

(Continued on page 381)

Spinster Jane Says

Rain came at last after nearly three weeks of dry, scorching heat—ideal weather for making hay, but disastrous to standing fields of light hay, growing grain—causing us to wield the hoe vigorously to combat that persistent "quack" grass which neither heat nor drought can discourage. We wished for a 24-hour gentle rain, but were thankful for one whole night of it. Already green plants in the garden are again proudly erect.

I thought this season was ideal for bees. It has been hot and dry, and clover has bloomed abundantly everywhere. Still, judging by the weekly gain made by the colony we keep on the scales, it is rather disappointing. Nectar is not coming in as we had expected, and now I understand why. It is drying up and requires moisture if the bees are to get it in any quantity. The bees have worked hard, but the nectar isn't there for them. Will frequent showers work one of Nature's miracles and increase the flow of this precious nectar?

Yesterday for the very first time we were visited by a real, honest-to-goodness bee inspector, in the person of Mr. George Neil of Tara, Ont. Boy was delighted, and gladly drove him to visit all those keeping bees hereabout.

We were glad indeed that he could report no bee diseases in this district.

Mr. Neil owns and manages an apiary containing more colonies than the combined number found on Manitoulin Island and in Sudbury District as well.

The honey flow in his part of Ontario far exceeds ours due to there being more rainfall and consequent moisture. Thanks be, that district will be able to show results, and help out in our sweet shortage.

The inspector also gave us valuable advice on winter food for bees. He agrees with "Boy" that goldenrod honey is poor winter food, also tells us that honey made from wild aster—plentiful around here—will prove disastrous as winter food. It crystallizes quickly and bees will starve on it. I think this may explain our big loss last winter.

Mr. Neil advises extracting all late honey, returning the empty combs to the hive to ensure a goodly supply of pollen or "bee-bread", then feeding sugar syrup to fill everything up. He says there is no better food for winter feeding.

We do not believe run-away tree swarms can survive one of our severe winters. Many trees in which dead colonies were found have been cut down, yet perhaps they can live in some big hardwood bush. Let me explain why I think this.

One of "Boy's" brothers went on a fishing trip for mountain trout, a good ten or twelve miles north of here. He got a fine string of trout, but more interesting still, reported seeing a number of honeybees, and wondered if there could be a bee tree near. He invited "Boy" to go fishing, too, but the latter said he would much rather find a good bee-tree than get any number of trout. Some day, if ever he can take the time off, he may solve the mystery and trace the bees to their tree, for tree it surely is. Few people live in this wilder more wooded section, and none of them have bees.

This year our hopes are somewhat dashed for a bumper crop, still our work has its compensations. Without it, "Boy" would not have his healthy coat of tan, nor would he get the outdoor exercise that he needs. Besides he loves the work, and knowing he is not to blame for the lack of moisture, he can overlook the weatherman this year again and look to the future. Never must we look back (like Christian) but always hope and look ahead.

FREEING HANDS OF PROPOLIS

As mentioned recently in Gleanings, Boraxo, which is sold at groceries, can be used to good advantage in removing propolis from the hands after working with bees. We have used it.

Another product, Pro-Tek, has been recommended by Geo. M. Lord, Fayette, Mass. This should be put on the hands before handling propolis-covered frames. It can be secured at drug or hardware stores. We have not used Pro-Tek.

Buy and Sell Here

CLASSIFIED ADS

Only responsible advertisers and honest advertisements will be admitted to these columns. References required from new advertisers not known to us. Rate: 8 cts. per counted word, as "a" and the longest word possible for the advertiser to use, as well as any number (regardless of how many figures in it), count as one word. Copy should be in by the 10th of the month preceding.

HONEY FOR SALE

COMB HONEY that looks and tastes right. Geo. Rehman, North Baltimore, O.

300 60's of buckwheat and fall honey, at 12c lb., or make an offer. 24 pound jars. $4.25. L. Konces, North Abington, Massachusetts.

WE BUY AND SELL all varieties of honey. Any quantity. Write us for best prices obtainable. The Hubbard Apiaries, Manufacturers of Beekeepers' Supplies, Onsted, Michigan.

FOR SALE—Imported Guatemalan, Cuban, and Chilean honey, original containers or repacked. Prompt deliveries. We are buyers of Beeswax. Pan-American Export & Import Agency, 132 Nassau St., New York 7, N. Y.

FOR SALE—50 60-lb. tin amber clover, $12.00 can; 50 60-lb. tin California eucalyptus, $12.00 can; 50 60-lb. tin California avocado, $12.00 can; 50 60-lb. tin amber goldenrod, $10.80 can; 100 60-lb. tin dark Cuban (special), $10.00 can. Natural Foods Institute, 624 Prospect Avenue, Cleveland. Ohio.

HONEY AND WAX WANTED

BEEKEEPERS TAKE NOTICE—We cannot guarantee honey buyers' financial responsibility, and advise all beekeepers to sell for cash only or on C.O.D. terms except where the buyer has thoroughly established his credit with the seller.

WE PAY CASH for extracted clover honey. Fairfield Honey Company, Millersport, Ohio.

WANTED—White and amber honey; any amount. D. F. Treap, 317 Keenan Ave., Cuyahoga Falls, Ohio.

WANTED—Comb and extracted clover honey. New York State preferred. Blossomdale Apiaries, Warrensburg, N. Y.

WANTED—Comb and extracted honey, any quantity; also garden tractor, any condition. R. C. Poland, Jefferson, Ohio.

HONEY AND BEESWAX—Highest prices paid. Mail samples. Advise quantity. BRYANT AND COOKINGHAM, LOS ANGELES, CALIF.

COMB HONEY WANTED—State size sections, how packed, and the quantity you have. Frank H. Hauck, P. O. Box 84, Kew Gardens, N. Y.

WANTED—Highest prices paid on white comb, chunk, and extracted honey, any amount. Lose Bros., 206 E. Jefferson, Louisville, Ky.

BEESWAX — Highest cash prices paid. Send sample and advise quantity available. MUENCH-KREUZER CANDLE CO., INC., Syracuse 1, N. Y.

HIGHEST cash return made the day we receive your beeswax. Write for shipping tags and quotations. Walter T. Kelley Co., Paducah, Kentucky.

CASH FOR YOUR HONEY, extracted or comb. Regular trade, send sample. 60-pound cans furnished, if desired. W. R. Moomaw, Stone Creek, Ohio.

WANTED—All grades of comb and extracted honey. Bee supplies and honey containers for sale. Prairie View Honey Co., 12243 12th St., Detroit, Mich.

HONEY WANTED—All Grades and Varieties. Highest Cash Prices Paid. Mail Samples. State quantity. HAMILTON & COMPANY, 1360 Produce Street, Los Angeles, Calif.

HONEY WANTED—12c pound cash paid, plus freight for your white and amber extracted honey delivered to Lansing, or will pick up. M. J. Beck Co., 510 N. Cedar, Lansing, Mich.

CLOVER HONEY WANTED—Top prices for extracted section, and shallow frame comb. Truckloads or carloads. Tell us if you can deliver. KEDASH BROTHERS, Chillicothe, Ohio.

WANTED—White or light amber extracted honey from 1000 lbs. to a carload. Cash waiting. Send samples and best price to Honeymoon Products Co., 39 E. Henry St., River Rouge, Mich.

CLOVER HONEY WANTED—Large or small lots. Would like to establish permanent connections with several good producers. Ellsworth A. Meineke, R. 1, Arlington Heights, Ill.

HONEY AND WAX WANTED. All grades. Any quantity. Send samples and your best cash price. We carry large stock of Tin and Glass honey containers. ALEXANDER COMPANY, 819 Reynolds Road, TOLEDO, OHIO.

WANTED—Three million pounds of honey. Will buy your entire crop of white honey, amber, and buckwheat honey. It is needed to supply my 361 small bottlers and users of honey. You will get ceiling prices at Townsend's. Address TOWNSEND SALES COMPANY, Northstar, Mich.

FOR SALE

I SELL BEST outfit for finding bee trees. Grover, Bristol, Vt.

FOR SALE—400 good used 5 gallon cans, 35c a case. W. Mendenhall, Moorestown, N. J.

MY FAVORITE BEE VEIL. Write for description and price. G. M. Ranum, Mount Horeb, Wisconsin.

POLLEN TRAPS, three sizes, approved by Dr. Farrar, $2.50 each postpaid. Geo. De Koeyer, Baraboo, Wis.

HONEY WANTED
Carloads and less, all grades.
Will pay top prices.
Would contract now for crop.
Also Beeswax.
H. & S. HONEY & WAX COMPANY, Inc.
265 Greenwich Street, New York, N. Y.

Comb Honey Wanted
Advise quantity, grade, size section and how packed.
FRANK H. HAUCK
P. O. Box 84, Kew Gardens, N. Y.
Bank references furnished on request.

WANTED--Extracted Honey All Varieties
Send samples and delivered prices to
JEWETT & SHERMAN COMPANY
Cleveland, Kansas City and Brooklyn

HONEY WANTED
Carloads and less than carloads.
Mail sample and best prices in all grades.
C. W. AEPPLER COMPANY
Oconomowoc, Wisconsin

HONEY WANTED
Carloads and less. All grades. Pay cash. Can furnish containers.
J. W. REITZ & BROS.,
Summerfield, Florida

STEEL DRUMS FOR HONEY
Ship your honey in Steel drums (no leakage in transit)
Drums free to our shippers. Write us.
THE FRED W. MUTH CO.
229 Walnut St. Cincinnati 2, O.

QUEENS - NORTHERN BRED - QUEENS
Bred from Italian stock of 30 years selective breeding. .I am a War veteran of 1918. Requeen with my queens and put the sting to the Axis. I am putting all of my queen sales into War Bonds. Keep the bees and bombers flying, and our boys fighting this war from dying. Buy war bonds, and my queens will help you and me buy more War Bonds.
Price on queens, $1.00 each
WEST BRANCH APIARIES
Grover Hill, Ohio

QUEENBEE PAINTING outfits $1.00, colony records 10-15c postpaid. Southwick Apiaries, Waban, Massachusetts.

FOR SALE—32 60-lb. honey cans, 2 openings, used once, no rust, in strong wooden cases, $8.00 F. O. B. Sumner, Iowa. Rev. F. Schedtler.

COMB FOUNDATION at money-saving prices. Wax worked at lowest rates. Comb and cappings rendered. Robinson's Wax Works, Mayville, N. Y.

FOR SALE—6-frame electric Root extractor, in fine condition, also large honey tank with gate. Phone 1678 or write, Mrs. Wilma Huff, Grinnell, Iowa.

FOR SALE—1500 new 60-lb. honey cans F.O.B. warehouse, Coon Rapids, Iowa, at 35c each. 500 used 60-lb. cans with cartons at 25c each. Frank Beach Apiaries, Coon Rapids, Iowa.

WRITE FOR CATALOG. Quality bee supplies at factory prices. Prompt shipment. Satisfaction guaranteed. The Hubbard Apiaries, Manufacturers of Beekeepers' Supplies, Onsted, Michigan.

SAVE MONEY by letting us work your wax into wired regular comb foundation. Large catalog describes everything. You pay only wholesale factory prices as we have no agents. Walter T. Kelley Co., Paducah, Kentucky.

FOR SALE—17 hives bees, 70 metal covers, 150 Hoffman supers, 60 shallow supers, 50 queen excluders, bottom boards, inner covers, all 10-frame. 15 Dadant hives, empty, inspected. M. Noack, Rt. 2, Plano, Illinois.

FOR SALE—What am I offered for the following—separately or collectively? One Root 2-frame automatic honey extractor. Large heating equipment for Root Uncapper as follows: 1 Presto gas heating appliance tank holding 10 gallons, 2 burners, 1 five gallon brass boiler with safety valve. About 35 ft. one-quarter inch lead pipe to convey gasoline from tank to burner. Wall shut-off, 2 way; 210 screens for moving bees, new, made of 1x3⅜ in. cyprus strips on each side of screen. Screen 14 gal. strands to the inch. Also have strip down the center well made. Penn G. Snyder, Trotwood ,O.

BEES AND QUEENS FOR SALE

BRIGHT ITALIAN QUEENS, $1.00 each. D. W. Howell, Shellman, Georgia.

Will not accept any more orders this season. Emil W. Gutekunst, Colden, N. Y.

GOLDEN ITALIAN QUEENS, $1.25 each any number. Carolina Bee Farm, Graham, N. C.

CAUCASIANS, untested queens. $1.00 each. Lewis & Tillery Bee Co., Greenville, Ala.

PACKAGE BEES for 1945. Now booking orders. Crenshaw County Apiaries, Rutledge, Alabama.

NORTHERN-BRED Queens. Hardy honey producing Italians. $1.00 each. Shirl Baker, Rodney, Michigan.

REAL PETS, Brown's stingless bees. Queen, $1.25 for the season. Brown's Apiary, Cape May Court House, N. J.

BE WISE—CAUCASIAN-IZE with Caucasian queens from Crom's Caucasian Apiaries, P. O. Box 24, Manteco, Calif.

IMPROVED ITALIAN Queens, 80 cents, from a strain that produced over 600 pounds per colony. Henry Loehr, Caldwell, Texas.

YOUR BEST HIVES next spring will be the ones you requeen this fall. Queens, 75c each, balance of season. D. P. Green, Deland, Fla. R. 2.

FOR SALE—900 colonies bees, also locations and extra equipment worth $8000, all for $10,000 cash. Inspection certificate furnished at time of sale. Marks Tupelo Honey Co., Apalachicola, Florida.

FOR SALE—35 stands, 8's and 10's, some Jumbo, mostly straight combs. Good stuff. Guaranteed free of disease. John Wharton, 3404 Wesley, Greenville, Texas.

Three-banded Italian bees and queens finest quality. Package bees, 2-lb. and queen, $3.50; 3-lb. and queen, $4.50; select untested queens, 1 to 25, $1.10; 25 to 100, $1.05; 100 up, $1.00. Health certificate with every order. Alamance Bee Co., Graham, N. C.

PLANNING FOR TOMORROW? Then do not miss this opportunity to requeen or make increase with these Italian queens, bred for all purposes, $1.00 each; $10.00 per dozen. Victor Apiaries, Rt. 1, 112 U. S. Hy., Belleville, Mich.

FOR SALE—350 colonies bees, equipped for extracted honey, on clover and buckwheat locations, free of disease on spring check. 90 acre farm with house, barn, and honey extracting plant fully equipped. Located near Watkins Glen. To be sold as a unit only. Cecil Cass, Montour Falls, N. Y.

FOR SALE—230 colonies bees with locations in Pennsylvania, 120 8-frame with double brood chambers, balance 10-frame colonies, with or without buckwheat crop, with full extracting equipment. 90% combs are wired both vertically and horizontally. Bees guaranteed free from disease. W. C. Long, 1325 Andre St., Baltimore, Md.

APIARY SIGNS

APIARY SIGNS, thousand sold coast to coast. Save triple value or money refunded. Eight signs, dollar postpaid. Koenitzer, Muscotah, Kansas.

WANTED TO BUY

WANTED—Electric uncapping knife. Merl Harrington, Benton, R. D. 2, Pa.

Hive lifter as manufactured at Bad Axe, Michigan. Walter T. Kelley, Paducah, Ky.

HELP WANTED

WANTED—Man for balance of season to help with bees. Frederick D. Lamkin, Union Springs, N. Y.

WANTED—A young man thoroughly familiar with bees to work in our stock room at the New York office. Write The A. I. Root Co., 12 W. 21st St., New York, N. Y.

MAGAZINES

MANY BEEKEEPERS have proven raising fox, mink nutria, muskrats, rabbits, highly profitable. Send dime for sample copy. Canada's oldest fur farming magazine tells how. Fur Trade Journal of Canada, Box 31, Toronto 2, Ontario.

BEFORE PLACING LARGE QUEEN

orders for immediate shipment this fall, contact us.

Due to the war conditions and the draft we cannot promise delivery on short notice

Package bees next year as usual.

Rossman & Long

Box 133 Moultrie, Ga.

Queens

75c each

any number—by return mail.

Health Certificate Furnished
Bright 3-Band Italian bees and queens of highest quality. Purely mated. Safe arrival and satisfaction guaranteed. Packages express collect.

NO STAMPS ACCEPTED

Untested Queens	$ .75
Tested Queens	1.50
2 lb. pkg. with Queen	3.00
3 lb. pkg. with Queen	4.00

John A. Norman

ROUTE 2 Ramer, Ala.

THREE-BANDED ITALIAN QUEENS

PRICES:

1 to 24	$.75
25 to 99	.70
100 and over	.65

Postpaid

HOMAN BROS.
Shannon, Miss., R. R. 2

PROMPT DELIVERY

NOW of HOLLOPETER'S finest queens reared during the buckwheat honey flow. Italians, bred for honey-gathering qualities. Safe arrival and satisfaction guaranteed. Untested, 1-9, $1.00 each; 10-24, 90c each; 25-99, 80c each; 100 or more, 75c each. Tested queens, $2 each.

WHITE PINE BEE FARMS,
Rockton, Pa. L. B. 80

Bees & Queens! We urge early (cash with) orders for priority on all supplies. . CREDIT for Beeswax. Write for price lists.

WESTERN CANADA BEEKEEPER, official organ of the Manitoba Beekeepers' Association, one year $1.00; in combination with one year's subscription to Gleanings in Bee Culture. $1.75. Wallingford Building, Winnipeg, Canada.

READ the South African Bee Journal to be conversant with conditions from far afield. Subscription 5/ per year. For further particulars write to the Hon. Treasurer, P. O. Box 43, Cleveland, Johannesburg, S. Africa.

THE INDIAN BEE JOURNAL—The only bee journal in India. Sample copy free. Yearly, 7s. 6d., International Money Order. Apply Editor, Indian Bee Journal, Jeolikete, Dist. Nainital, U. P. India.

THE BEE WORLD—The leading Journal in Great Britain and the only international bee review in existence. Specializes in the world's news in both science and practice of apiculture. Specimen copy post free, 12 cents stamps. Membership in the Club, including a subscription to the paper, 10/6. The Apis Club, L. Illingsworth. The Way's End, Foxton, Royston, Herts, England.

ANGORA GOATS

INTERESTED in Angora Goats? Read the Sheep and Goat Raiser, Hotel Cactus, San Angelo, Texas, the only ranch magazine published serving the Angora Goat industry. Subscription — $1.50, Sample copy, 15 cents.

NORTHWEST HEADQUARTERS
—For—
HONEY CONTAINERS

We carry carloads of honey jars and 60-lb. cans in stock. Send for price list.

•

Lewis-Dadant Bee Supplies

•

Honey and Beeswax Wanted

Any amount, accepted in trade or will pay cash at ceiling prices.

HONEY SALES COMPANY
1806-08 No. Washington Ave.
Minneapolis 11, Minnesota

Mountain Gray Caucasian Queens

For July and later a reasonable number of queens at the following prices:

1-49	$1.10
50-99	1.05
100 & more	1.00

Good stock and well bred queens

BOLLING BEE CO.
Bolling, Ala.

ITALIAN QUEENS

1-99	$1.25 each
100-up	1.10 "

ALBERT KOEHNEN
LIVE OAK, CALIFORNIA

HELLO, FOLKS
HERE WE ARE AGAIN!

Stevenson's Line-Bred Goldens
To tell our good friends and neighbors we still have some queens available.
Prices: 1 to 24, $1.25; 25 and up, $1.10

STEVENSON'S APIARIES
WESTWEGO, LA.

HANDY HIVE TOOL & PLIERS COMBINED

Strong and durable for heavy service but light to handle. Give quick work and best frame lifter and holder. Price $1.00. California Bee & Tool Co., 810 W. Pedregosa St., Santa Barbara, Calif.

BETTER-BRED QUEENS---Three-Banded Italians

We are breeding from some record breaking queens, "better than ever". Rush orders filled promptly. .Remainder of season, 75c each, any quantity.

CALVERT APIARIES, Calvert, Alabama

TALKS TO BEEKEEPERS

(Continued from page 375)

ginner with from one to 25 colonies. The honey extractor should be placed on a stand of some sort and anchored down securely so that it does not rock while in motion.

Combs of approximately the same weight should be selected so that the machine may not be thrown out of balance. After the combs are uncapped with a hot knife, they are placed in the baskets of the extractor. A part of the honey is thrown out of one side of the combs, which requires only a few revolutions, then the combs are reversed and all of the honey is thrown out of the opposite side. The combs should be reversed again and all of the honey thrown out of the first side. This procedure prevents breakage of combs and does not subject the midribs of combs to undue strain.

ST. ROMAIN'S "HONEY GIRL"

ITALIAN QUEENS

1 to 3 inclu.	$1.00 each
4 to 9 inclu.	.90 each
10 to 23 inclu.	.85 each
24 or more	.80 each

Postpaid. Queens arriving dead or hurt will be replaced if returned promptly.

St. Romain's "Honey Girl" Apiaries

MOREAUVILLE, LA.

NORTHERN BRED

Leather Colored Italian Queens from stock bred for resistance.

$1.00 each; 25 or more, 85c each

DIEMER BEE CO.,

Liberty, Mo.

LOWER PRICES: QUEENS 75c each By return mail

YES. WE HAVE THEM **Bright 3-Banded Italian** THE BEST KIND YOU CAN BUY

At this low price, NOW is the time to requeen with the best Italian queens of proven quality. You will have less winter loss, better colonies next spring. Our twenty-four years of experience assures you of the best stock money can buy. Safe arrival and satisfaction guaranteed in every respect.

2-lb. Pkg. with queen $3.00 each
3-lb. Pkg. wtih queen $4.00 each
Package bees F. O. B. Express; if wanted by parcel post, add postage.

NORMAN BROS.' APIARIES, RAMER, ALA.

QUEENS: Progeny-Test 3-Banded Italians

QUEENS: Daughters of Stock Bred for Resistance

QUALITY AND SERVICE

Do you want Queens that winter better, produce larger crops, have long life without supersedure, less inclined to swarm and resistancy to afb? We suggest you try a few MRAZ STRAIN QUEENS. These breeders are the pick of 800 colonies with proved characteristics to survive Northern Vermont climate. They may prove successful in your territory.

All shipments fully protected by Health Certificates

PRICES: Queens, 1-24, 90c; 25-50, 85c; 51-99, 80c; 100 and up, 75c

GARON BEE COMPANY

DONALDSONVILLE, LA.

Telegram—Western Union **Telephone 8614**

YORK'S PACKAGE BEES AND QUEENS

QUALITY BRED ITALIANS

The rush for package bees has ceased for the season. Our greatest handicap was the long drawn out rainy season all spring, plus the help shortage which delayed shipping to some extent, and we are very sorry this had to happen. A large number of orders had to be returned as we were booked up by early spring and in no position to accept further orders.

Some have already booked orders for 1945 and others are requesting information on early booking. To this, we are willing to book your order now subject to prevailing prices in the spring of 1945. We are not urging you to book now, but it may be advisable to do so as the trend seems to indicate an early sell out.

For the balance of this season we will continue to supply a limited number of packages of bees and queens at following prices.

Untested Italian Queens .... $1.10 each
2-lb. pkgs. of bees with queens $3.65 each
3-lb. pkgs. of bees with queens $4.75 each

Prompt Shipments

York Bee Company
JESUP, GEORGIA, U. S. A.
(The Universal Apiaries)

ITALIAN QUEENS
Bred for Prolificness only.
1 to 4, $1.00; 10 to 19 each, .90 p. p.
5 to 9, $0.95; 20 to 49 each, .80 p. p.
50 to 100, each 75 cents
Air Mail .08 extra.
For larger amounts, write for prices. No C. O. D.
PLAUCHE BEE FARM
Hamburg, Louisiana

When Writing to Advertisers Mention Gleanings

Balance of season will be spent in raising the best queens possible. Your next season's production depends on having good ones. I have many long time satisfied customers and believe I can also please you.

Two strains to choose from — Gentle three band Italians and daughters of queens bred for resistance.

Priced as follows:

1 to 24	$1.00
25 to 99	.90
100 and up	.80

A. E. SHAW
Shannon, Miss.

ITALIAN QUEENS
Northern Bred for business, safe arrival
47 years breeding experience
Untested, $1.00; 3, $2.75; 6, $5.00
Select, $1.25
I. F. MILLER, 103 N. Carver Street
Warren, Pa.
Formerly of Brookville, Pa.

CHOICE ITALIAN QUEENS and package bees.
We have been furnishing queens and package bees through other shippers. Let us furnish yours direct. Write for prices.
CLIFTON APIARIES
P. O. Box 684, Oroville, Calif.

QUEENS

ITALIANS — Daughters of Queens bred for Resistance
CAUCASIANS — Bred to Italian Drones
QUEENS balance of this year $1.00 each. Send for Free Circular.
2 lb. pkg. bees with queen, $4.00; 3-lb. pkg. with queen, $5.00
Over 25 years a shipper in U. S. A. and Canada.
BLUE BONNET APIARIES, Route 1, Box 70, Mercedes, Texas

QUEENS—ITALIANS—QUEENS

Over thirty years of scientific selection has resulted in the production of stock you will appreciate. Introduce our queens now and reap your rewards next year.

Prices: 1-24 .... 90c 25-99.... 85c 100 up 80c
BESSONET BEE COMPANY Donaldsonville, La.

This photo shows portion of our queen bee yard containing over 6000 nuclei.

5,000 three pound package bees with queens available

Packages in Proportion	May we serve you
	3 lb. with qns. $5.00
	2 lb. with qns. 4.00
	Extra qns. 1.25
	By Express

OVERBEY APIARIES, BUNKIE, LA.,

THE FOOD CHAMBER

(Continued from page 359)

hive is slightly in excess of $11.00—is it any wonder that I like to stress marketing for the little beekeepers' attention?"

Summary

Accurate data has been kept since the establishment of our home yard in 1921. During the early days, with only a few hives, we sold mostly to a consumer trade. This long-time record shows an average production of 138.8 lbs. per colony, but the higher retail prices runs the income per hive to $13.64.

Our biggest worry just now is trying to arrive at a decision at to whether these results should be credited to our questionable system —or am I just a "lucky fool?"

Luling, La.

[Ed.: In the North where low winter temperatures prevail, queen excluders should not be left below food chambers during winter months, because queens below excluders may be stranded and lost. due to their not being able, because of excluders, to keep near the center of the winter clusters which frequently are formed on the combs of the food chambers. In the South weather conditions permit using excluders under food chambers.]

BUY U. S. WAR BONDS AND STAMPS

MOORE'S STRAIN

Away back in 1879, I commenced rearing Italian queens with the object of improvement constantly in view. By careful selection during all these years I have succeeded in producing a strain of three-banded, leather-colored Italian bees known as Moore's Strain of Italians which has won a world-wide reputation for honey-gathering hardiness, gentleness, etc.

Send for descriptive circular and read reports from those who have tried them. Untested queens $1.25 each; 6 for $7.00; 12 or more $1.00 each.

J. P. Moore, Rt. 3 **Falmouth, Ky.**

Former address, Morgan, Kentucky

Safe arrival and satisfaction guaranteed

REMOVING AND EXTRACTING THE HONEY CROP

(Continued from page 355)

Here they remained until the weather got cool enough to store them inside, without too much risk of moth damage. This method had some disadvantages, such as danger of mice, and mold in damp weather. A spell of hot weather with hot nights would sometimes give moths a start. Covers blew off and rain got in. We now have two fumigating rooms built of brick and very tight. Each holds 800 supers of combs. We fumigate these rooms as soon as we get them filled with combs, using Methyl Bromide. Two pounds Methyl Bromide seems sufficient for 800 supers. We have never seen any moths in combs fumigated in these rooms. Supers are kept off the floor about one inch with wooden blocks. An electric fan is used for a few hours at fumigating time to thoroughly circulate the fumigant. While we like combs stored dry, due to pressure of work, we are storing wet combs, fumigated as soon as extracted. I understand Methyl Bromide is deadly poison and should never be use in the honey house proper.

Alvinston, Ont., Canada

ATTENTION

Carefully Produced Three - Banded Italian Queens For Commercial Honey Production

1 to 23	$.90 each
24 to 99	.85 "
100 or more	.80 "

Send cash with order in American funds. All orders will have prompt attention. Live delivery and satisfaction guaranteed.

"More than 20 Years of Commercial Queen Production"

JOHN C. HOGG

Tifton, Ga., U. S. A.

Look for this Sign
QUALITY at LOW COST
When You Want

Trade Mk. Reg.
U. S. Pat. Off.

KELLEY—"The Bee Man"

Glass - Tin

16 oz. Economy Jars, carton 24 each,	$0.70
32 oz. Economy Jars, carton 12 each,	.42
5 lb. Economy Jars, 12 cartons	5.00
24 cartons	9.95
60 lb. Square tin cans, carton of 16	5.40

Quick shipment from large Paducah stock

THE WALTER T. KELLEY CO.

Paducah, Kentucky

---

the Hubbard APIARIES

WRITE FOR
FREE CATALOG

Quality Bee Supplies Factory Prices
Prompt Shipment from Stock
Satisfaction Guaranteed

THE HUBBARD APIARIES

Manufacturers of Bee Supplies

ONSTED, MICHIGAN

Honey Containers

GLASS JARS . . . 60 POUND CANS
WINDOW CARTONS . . . CELLOPHANE WRAPPERS
LABELS . . . HONEY FOLDERS
WRITE FOR LOCAL PRICES

Shipping conditions are such and supply of containers are such that you should place your order at once.

The A. I. Root Co., Medina, Ohio

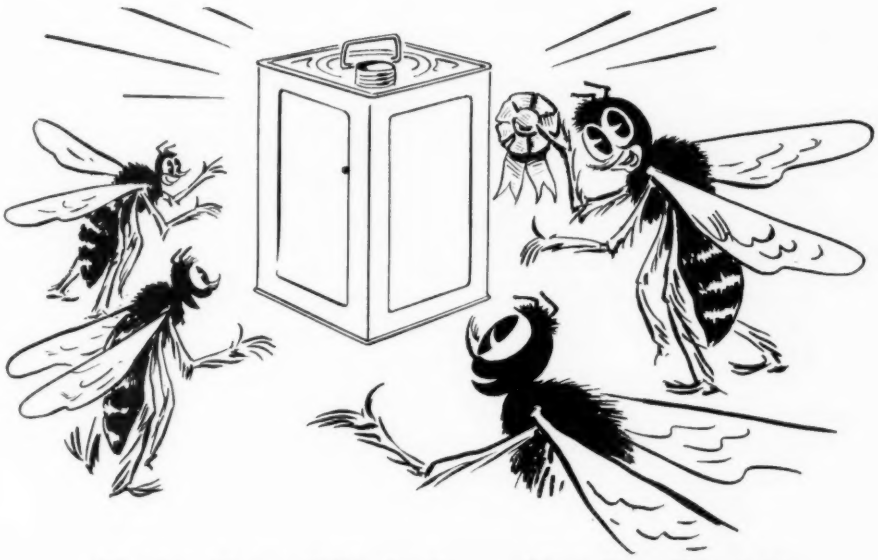
12 W. 21st St., New York, 10, N. Y.

The A. I. Root Co., of Iowa
Council Bluffs, Ia.

A. I. Root Co., of Indianapolis
121 No. Alabama St.,
Indianapolis, 4, Ind.

A. I. Root Co., of Chicago
224 W. Huron St., Chicago, 10, Ill.

A. I. Root Co., of Syracuse
1112 Erie Blvd., East,
Syracuse, N. Y.



Only One "Style" . . . But It's Right!

The 1944 honey can is limited to one size and shape . . . 60-pound square . . but there's no restrictions on quality of material or workmanship. So, as in pre-war days, you can depend on Continental for the bright, tight cans you need.

CALL THE NEAREST CONTINENTAL DISTRIBUTOR

PHOENIX, ARIZ.
Quick Seed & Feed Co.
Western Seed, Feed & Honey Co.

TUCSON, ARIZ.
W. C. Collier

ALAMEDA, CALIF.
F. E. Boyden-Hansen Co., Ltd.

ALHAMBRA, CALIF.
B-Z-B Honey Co.

LONG BEACH, CALIF.
J. E. Delgado & Co.

LOS ANGELES, CALIF.
Bryant & Cookinham, Inc.
California Honey Co.
Diamond Match Co.
Hamilton & Co.
Los Angeles Honey Co.

SAN FRANCISCO, CALIF.
E. F. Lane & Son

SPRING VALLEY, CALIF.
Dorwin L. Baker

VALLEY CENTER, CALIF.
A. K. Whidden

DENVER, COLO.
Martin Brothers Company
Attn: R. J. Chadbourne

MONTROSE, COLO.
Western Colorado Honey Exchange

JESUP, GEORGIA
York Bee Co.

BOISE, IDAHO
Reilly, Atkinson & Co. Inc.

GREELEY, IDAHO
L. R. Rice

CHICAGO, ILL.
A. I. Root Co.
W. F. Straub & Co.
Sears, Roebuck & Co.

HAMILTON, ILL.
Dadant & Sons

DECATUR, IND.
The Brock Store

COUNCIL BLUFFS, IOWA
A. I. Root Co. of Iowa

McGREGOR, IOWA
John Harnack & Sons

SIOUX CITY, IOWA
Sioux Honey Assn.
G. B. Lewis Co.

PADUCAH, KENTUCKY
Walter T. Kelley

BAY CITY, MICH.
Oscar H. Schmidt, R. F. D. No. 4

GRAND RAPIDS, MICH.
A. G. Woodman & Co.

ONSTED, MICH.
L. M. Hubbard

BADGER, MINN.
Gordon A. Bell

FOREST LAKE, MINN.
Lionel Hopkins

MINNEAPOLIS, MINN.
Mondeng Mfg. Co.

MOORHEAD, MINN.
Northwestern Supply Co.

HIGGINSVILLE, MO.
Leahy Mfg. Co.

MANHATTAN, MONT.
Cloverdale Apiaries

ALBANY, N. Y.
G. B. Lewis Co.

GROTON, N. Y.
Finger Lakes Honey Prod. Assn.

SYRACUSE, N. Y.
A. I. Root Co.

FARGO, N. DAK.
Magill & Co.

PORTLAND, ORE.
Lewis M. White

SAN ANTONIO, TEXAS
A. I. Root Co.

SALT LAKE CITY, UTAH
Miller Honey Co.

LYNCHBURG, VA.
G. B. Lewis Co.

WATERTOWN, WIS.
G. B. Lewis Co.

POWELL, WYO.
A. D. Hardy

CONTINENTAL CAN COMPANY

4622 WEST NORTH AVENUE, CHICAGO, ILL.

WHEELING · JERSEY CITY · LOS ANGELES · ST. LOUIS · CINCINNATI

PETTIT'S PACKAGE BEES AND QUEENS

• • •

Have you read what Deyell and Gooderham say in June Gleanings about wintering queens in nuclei? If not, look it up. Then order Pettit's queens FOR NOW. Requeen and make those nuclei to winter over.

1-23, .90 ea., 24-99, .85 ea., 100-up, .80 ea.

Canadians please note we can no longer accept payment at Georgetown, Ont. Send with order Money Order payable at Tifton.

For next Spring order package bees without queens to build up those wintered nuclei, or packages with queens to make more increase.

Orders booked now without deposits subject to agreement on prices in November.

• • •

Morley Pettit

Tifton, Georgia, U. S. A.

JENSEN'S

"Magnolia State" Strain Italian Queens. RIGHT NOW SERVICE. For bees with character, hustle and beauty, plus gentleness and hardiness, use our queens in your requeening. Three-banded Leather Colored Bees, distinctively brownish, not bright yellow.

Now booking orders for next spring delivery. Indications already point to an early sell-out for 1945.

Queen prices for balance of season:

1-24, $1.05; 25-99, $1.00; 100 and up .95 each.

Jensen's Apiaries

Macon, Miss.

QUEENS

Another package season is behind us and we have had our ups and downs. First, our bees were in the best shape during March and early April that we can ever remember. Then came the Rains, with attendant floods and cold weather. We lost about 200 colonies by being washed away, but this was only minor compared to the damage it did to our Queen Yards. Virgins couldn't mate; they would stay in the nuclei several days overtime, then finally go out and get lost. This cut our production to about 50 per cent for about a month and we found ourselves in the unenviable position of having plenty of bees, some trying to swarm, almost all needing feed, orders due to be shipped, and no queens. However, on May 6th we had our last frost and since then we have had nice weather. We were late shipping some orders. If yours was one we are sorry and want you to know that we were doing our utmost all the time.

We can now handle any reasonable sized orders for Queens At Once and will appreciate your business.

PRICES ON QUEENS

Lots of:	**1 to 24**	**$ .90 each**
	25 to 99	**.85 each**
	100 or more	**.80 each**

The Stover Apiaries

Mayhew, Miss.

H. J. Heinz Company
Pittsburgh, Pa.

The Sioux Honey
Association
Sioux City, Iowa

The John G. Paton
Company, Inc.
New York City

T. W. Burleson & Son
Waxahachie, Texas

MAKE ONE OF THESE BRANDS THE SIGN OF YOUR OWN FUTURE PROSPERITY

B-Z-B Honey Company
Alhambra, Calif.

Superior Honey Company
Los Angeles, Calif.

C. W. Aeppler Company
Oconomowoc, Wis.

Sell every pound of honey you can to support one of these famous established packers.

Reproduced here are famous labels under which a great proportion of America's branded honey goes to market.

Through the years, housewives have come to trust these labels for honey of topmost quality . . . for honey that is just as delicious as when it leaves your hives . . . for honey with a goodness and flavor they can depend upon *every time.*

Thousands of dollars in advertising and lots of hard and conscientious work have gone into the development of the big, stable and enduring national honey market which these well-known and respected labels represent.

This market is, by all odds, the biggest single market for the Beekeeper's honey. It is the market upon which he must depend now, as in the future, for good prices, good profits. Imagine, if you can, what would happen to honey sales if this market did not exist.

Think this over in connection with the sale of your current honey crop, Mr. Beekeeper, and decide now to make one of these brands the sign of your own future prosperity.

Do this by letting one of these Packers know how much honey he may expect from you right away. You'll not only get top O.P.A. ceiling prices, but you'll safeguard your own future best interests more effectively . . . and more permanently . . . than you can possibly do in any other way.

The Monthly Honey Market

INFORMATION FROM PRODUCING AREAS

(Prices generally refer to sales at wholesale)

California: (Period June 22-July 7)

Southern California.—Temperatures during the latter part of June were below normal but during early July were up to normal in the interior valleys although the coastal areas had temperatures somewhat below normal with morning fogs. In the orchard areas there was little for bees to work except mustard and various ornamentals and a few miscellaneous ground flowers. In the hills wild buckwheat produced fairly well although it is expected this crop will be below average. White sage continued to yield lightly in some sections and sumac was providing considerable pollen and a little nectar. Robbing has been serious in the orchard sections where the nectar flow is light. Extracting has been light and offerings have been rather limited. Demand has been active for all available supplies at the ceiling of 14.40c per case of 120 lbs. f. o. b. country points.

SUMMARY

Based on early July reports from bee-

GET TOP PRICES FOR HONEY!

● H. J. Heinz Company—makers of the famous 57 Varieties—is in the honey business, to market millions of pounds annually—now and after the war.

If you want to continue getting top prices for your honey . . .

If you want to establish a permanent and profitable outlet for your honey production . . .

We Suggest That You Sell Us Part Of Your Honey Crop

We need volume—and we pay top prices. We can help you and all concerned in the honey industry, if you cooperate. Let's get together.

Write Us Today

H. J. HEINZ COMPANY

Pittsburgh 30, Pa.

CAUCASIANS

Extra gentle, prolific, long tongue, little inclined to swarm, dependable workers—10% to 40% ahead of the average Italians. Foundation stock from the mountainous region of Terek, Caucasus.

CARNIOLANS

Build up rapidly even during unfavorable springs. Prolific at all times, very gentle, best of workers, 33rd year with them.

PRICES: Untested queens .....$1.00 each
Tested " ..... 1.75 each

Queens by Airmail, 6c extra per queen

Ask for prices and mailing dates in lots of 25 or more.

August is a good month to requeen and prepare for season of 1945.

Albert G. Hann, Glen Gardner, N. J.

QUALITY BRED ITALIAN

QUEENS

85c Any Quantity

THE PUETT COMPANY

Hahira, Ga.

TOWNSEND SALES COMPANY

E. D. Townsend **Northstar, Michigan**

I pay ceiling price for Michigan honey, either white, amber, or buckwheat. What have you? This price, $7.20 per can, is for honey at your door, in 60-lb. cans, no shipping case required. A postal card will bring our truck to your place at once. No new customers for honey wanted. Another year, when crop conditions are better, it is hoped to have honey for all comers. Until then, thanks a lot.

keepers indications are that the honey crop for 1944 will again be below average. The drouth which began in the South Atlantic States has spread westward through the Ohio Valley and over much of the East Central and North Central States. In the Clover Belt from New York westward to Michigan and Indiana prospects are much less favorable for a normal honey crop than they were in mid-June. Indications are for a better than average crop in Colorado with possibly average crops in Wyoming, Utah, and Montana. Over the rest of the Intermountain region and in the Western States prospects are below average. In the Southwest and Southeast the main crop has been gathered. In portions of Texas yields were average or better while in other sections of the State the crop is below normal. In the Southeast, Georgia will possibly have a normal crop while in the other States of this group indications are below normal.

In the Southern Belt of States considerable honey has been extracted but in the Clover Belt and the Intermountain region little extracting has been done. Quality of the Clover honey is reported as better than average in most sections. This is especially true of the section comb crop. While packers and other large buyers have been active in attempts to contract honey for next season there does not seem to be the feverish activity that existed at this time last season. There is still some honey, boh domestic and imported, still in the hands of packers, wholesalers, and retailers. Demand at retail has been light during recent months. Present indications are that many beekeepers will pack and market their crop locally to retailers and consumers as they did last season. Practically all sales continue at ceiling levels of 12c per lb. f. o. b. to beekeepers in case lots to carlots, and 15c per lb. in single 60s to consumers. Occasional lots of dark honey are moving below ceiling.

Monthly Report of Honey Producers

Early in July we sent the following questions to honey producers: 1. At what price has honey been sold or contracted for, if any, in large lots (carload lots or less) in your locality during the past month for (a) extracted honey, per pound. (b) comb honey, fancy and No. 1, per case? 2. What are prices when sold to grocers in case lots of (a) extracted honey in 5-lb. pails, or other retail packages in terms of 5-lb. pails? (b) Comb honey, fancy and No. 1 per case? 3. What is the retail price to consumers in your locality of (a) extracted honey in 5-lb. pails, or other retail packages in terms of 5-lb pails? (b) comb honey, fancy and No. 1, per section? 4. How is honey now moving on the market in your locality? Give answer in one word, as slow, fair or rapid. 5. How does the number of colonies that are in condition to store surplus honey this season compare with the number of such colonies last year? Give answer in per cent. 6. What is the condition of the honey plants at this time in your locality as compared with the average? Give answer in per cent. 7. What is the per cent of winter and spring loss of colonies (if any) in your locality? Give answer in per cent. 8. What is the present condition of the colonies in your locality as compared with normal? Give answer in per cent. The answers received are tabulated as follows:

		1		2		3	4	5	6	7	8
Date		Large Lots		To Grocers		To Cons.	Move-	No. of	Cond. of	% of	Con. of
Rec.	State Name	Ex.	Cb.	Ex.	Cb.	Ex. Cb.	ment	Cols.	Honey Plants	loss	Cols.
10	S-Ala. J. C. Dickman						Fair	80	100		80
11	B.C.-A. W. Finlay						Fair	100	100	15	80
11	S-Calif. L. L. Andrews						Rapid	90	90		75
12	SE-Colo O. E. Adcock						Fair	100	100	5	100
8	E.-Conn. Allen Latham						Fair	100	100		105
10	S-Fla. C. C. Cook						Slow	150	100	15	120
13	C-Fla. Harry Hewitt						Fair	100	100	2	100
10	SE-Ga. J. J. Wilder	5.09		5.80*			Rapid				100
12	NC-Ills. A. L. Kildow							100	25	2	100
11	S-Ills. Carl E. Killion	6.00		6.50		.36	Rapid	75	75	20	100
10	NW-Ind. E. S. Miller					.35	Slow	90	100	10	100
15	W-Iowa E. G. Brown						Fair	90	100	20	100
8	N-Mich. Ira D. Bartlett						Fair	60	150	5	150
8	E-Mich. L. S. Griggs					.30	Slow	75		20	70
10	S-Mich. Floyd Markham						Slow	100	50	6	100
12	C-Mich. E. D. Townsend						Rapid	90	100	20	80
8	SW-Minn. L. A. Syverud						Fair	100		22	100
14	W-Minn. B. L. Morehouse						Fair	95	95	8	90
8	S-Minn. J. F. Garner						Fair	100	80	10	80
15	C-Nbr. J. H. Wagner					.27	Slow		100	8	55
13	W-Nev. Geo. G. Schweis						Fair	90	100	5	90
13	W-N.M. C. A. Baltzley						Fair	100	100		100
11	NW-N.Y. Geo. B. Howe						Slow	90	80	5	90
11	C-N. Y. F. W. Lesser							100	100	10	100
8	SE-N. C. W. J. Martin					.30	Fair	100	100		100
8	C-Ohio R. D. Hiatt						Fair				100
15	NC-Okla. C. F. Stiles							85	100	10	85
10	SE-Penn. D. C. Gilham			6.00		.35	Fair	100	100	15	100
7	W-S. C. E. S. Prevost						Rapid	80	80		90
10	E-Tenn. W. L. Walling						Fair	90	10		75
11	C-Texas T. A. Bowden						Fair	90	100	5	100
10	S-Texas C. G. Mayes						Rapid	80	75	20	Poor
11	S-Texas H. B. Parks						Rapid	100	100	1.5	96
10	W-Utah Wm. Moran						Slow	75	100	20	90
10	SE-Wis. N. E. France						Slow			10	100

* 6 5-lb. jars to case

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25-lb. Thin Surplus Fdn.	19.75
Wire Face Veils	each .80
Bee Escapes	each .12
Smokers 4 x 7	each 1.00
2" Hive Staples	per lb. .30
60-lb. Cans (new)	each .38
60-lb. Cans (used—subject to being on hand)	each .25
1 lb. glass jars (packed 2 doz)	per case 1.00
2 lb. glass jars (packed 1 doz.)	per case .90
5 lb. glass jars (packed ½ doz)	per case .55
Ultra Violet Ray treated Queens	each 1.25

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2-lb. jars—case of 12—...42
1-lb. jars—case of 12—...38
1/2-lb. jars—case of 48—$1.28

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Well seamed and soldered, equipped 2½" wax board line caps.

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Successors to
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